

UNCLASSIFIED

AD NUMBER
ADB104046
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; 18 APR 1946. Other requests shall be referred to Defense Nuclear Agency, Washington, DC 20305.
AUTHORITY
DSWA ltr dtd 12 Jan 1998

THIS PAGE IS UNCLASSIFIED

Q
DNA-TR-83-1

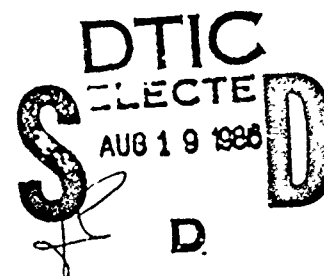
A PEACETIME/WARTIME FRAMEWORK

Soviet and Chinese Views of Military and Non-Military Factors
the Balance of Power and their Implications for the United States

Banning N. Garrett
Bonnie S. Glaser
Palomar Corporation
1715 N Street, N.W., 3rd Floor
Washington, DC 20036

31 January 1984

Technical Report



CONTRACT No. DNA 001-83-C-0298

Distribution authorized to U.S. Government agencies
only; Administrative or Operational Use, 18 April 1986.
Other requests for this document shall be referred to
Director, Defense Nuclear Agency, Washington, DC
20305-1000.

THIS WORK WAS SPONSORED BY THE DEFENSE NUCLEAR AGENCY
UNDER RDT&E RMSS CODE B383083466 V99QAXNN00021 H2590D.

Prepared for
Director
DEFENSE NUCLEAR AGENCY
Washington, DC 20305-1000

AD-B104 046

ATTN: FILE COPY

86-6 AC 024

DISTRIBUTION LIST UPDATE

This mailer is provided to enable DNA to maintain current distribution lists for reports. We would appreciate your providing the requested information.

- ☐ Add the individual listed to your distribution list.
- ☐ Delete the cited organization/individual.
- ☐ Change of address.

NAME: _____

ORGANIZATION: _____

OLD ADDRESS

CURRENT ADDRESS

TELEPHONE NUMBER: () _____

SUBJECT AREA(S) OF INTEREST:

DNA OR OTHER GOVERNMENT CONTRACT NUMBER: _____

CERTIFICATION OF NEED-TO-KNOW BY GOVERNMENT SPONSOR (if other than DNA):

SPONSORING ORGANIZATION: _____

CONTRACTING OFFICER OR REPRESENTATIVE: _____

SIGNATURE: _____

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

AD-3104046L

REPORT DOCUMENTATION PAGE

Form Approved
OMB No 0704-0188
Exp Date Jun 30 1986

1a REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b RESTRICTIVE MARKINGS		
2a SECURITY CLASSIFICATION AUTHORITY N/A since Unclassified			3 DISTRIBUTION AVAILABILITY OF REPORT Distribution authorized to U.S. Government agencies only; Administrative or Operational Use, 18 April 1986. Other requests for this		
2b DECLASSIFICATION DOWNGRADING SCHEDULE N/A since Unclassified			5 MONITORING ORGANIZATION REPORT NUMBER(S) DNA-TR-83-57		
4 PERFORMING ORGANIZATION REPORT NUMBER(S) 84-04-001			7a NAME OF MONITORING ORGANIZATION Director Defense Nuclear Agency		
6a NAME OF PERFORMING ORGANIZATION Palomar Corporation		6b OFFICE SYMBOL (if applicable)	7b ADDRESS (City, State and ZIP Code) Washington, DC 20305-1000		
6c ADDRESS (City, State and ZIP Code) 1715 N Street, N.W., 3rd Floor Washington, DC 20036		9 PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER DNA 001-83-C-0298			
7a NAME OF FUNDING SPONSORING ORGANIZATION		7b OFFICE SYMBOL (if applicable)	10 SOURCE OF FUNDING NUMBERS		
8a ADDRESS (City, State and ZIP Code)		PROGRAM ELEMENT NO 62715H	PROJECT NO V99QAXN	TASK NO N	WORK UNIT DH006978
11 TITLE (Include Security Classification) A PEACETIME/WARTIME FRAMEWORK, Soviet and Chinese Views of Military and Non-Military Factors in the Balance of Power and their Implications for the United States					
12 PERSONAL AUTHOR(S) Garrett, Banning N. and Glaser, Bonnie S.					
13a TYPE OF REPORT Technical		13b TIME COVERED FROM 830504 TO 840131		14 DATE OF REPORT (Year, Month, Day) 840131	
15 PAGE COUNT 128					
16 SUPPLEMENTARY NOTES This work was sponsored by the Defense Nuclear Agency under RDT&E RMSS Code B383083466 V99QAXNN00021 H25900.					
17 COSAT CODES			18 SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB GROUP	China - Defense Strategy Nuclear Weapons		
1E	7		Soviet Union - Defense Strategy Post-Nuclear Conflict		
5	4		Balance of Power Peacetime-Wartime Approach		
19 ABSTRACT (Continue on reverse if necessary and identify by block number) <p>This report presents a new approach to assessing the balance of power in peacetime and wartime. This approach accounts for the changing relative importance of various military and non-military factors at different points along a peacetime/wartime continuum ranging from "eased tensions" through post-nuclear conflict and recovery. The peacetime/wartime approach points to major differences among American assessments and Soviet and Chinese perceptions of the balance of power.</p> <p>An analysis of Soviet and Chinese perceptions and assessments of the factors affecting the balance of power along the peacetime/wartime continuum is presented. The analysis is based partly on extensive interviews in Moscow and Beijing by the authors with Soviet and Chinese analysts in June and July 1983. The report applies the Soviet and Chinese balance of power assessments to the Sino-Soviet balance at various points on the peacetime/wartime continuum by examining past and potential conflicts.</p>					
20 DISTRIBUTION AVAILABILITY OF ABSTRACT <input type="checkbox"/> UNCLASSIFIED UNLIMITED <input checked="" type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21 ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a NAME OF RESPONDER (NO LOCAL)			22b TELEPHONE (Include Area Code)		22c OFFICE SYMBOL
Betty L. Fox			(202) 325-7042		DNA/STTI

DD FORM 1473, 84 MAR

83 APR edition may be used until exhausted
All other editions are obsolete

SECURITY CLASSIFICATION OF THIS PAGE

UNCLASSIFIED

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

3. DISTRIBUTION/AVAILABILITY OF REPORT (Continued)

document shall be referred to Director, Defense Nuclear Agency, Washington, DC 20305-1000.

18. SUBJECT TERMS (Continued)

Sino-Soviet Balance
Soviet and Chinese Perceptions
U.S. Deterrence and Warfighting Strategy

19. ABSTRACT (Continued)

The report explores the implications for U.S. defense programs and arms control approaches of the information and analyses presented. It assesses the implications of Chinese and Soviet balance of power perceptions for U.S. deterrence and warfighting strategies. It also examines the political and military implications of different outcomes of U.S.-Soviet negotiations affecting INF deployments in the Far East.

SECURITY CLASSIFICATION OF THIS PAGE

UNCLASSIFIED

SUMMARY

Section I introduces a new, dynamic approach to assessing the balance of power in peacetime and wartime. It is intended to supplement rather than substitute for traditional military balance assessments.

Assessments of the military balance generally do not include political, diplomatic, economic, psychological and geographical factors and the perceptions of these factors by other powers. Such factors are difficult to quantify but may be decisive in determining the likelihood, course and outcome of conflict.

This approach examines the balance of power in changing strategic environments along a peacetime/wartime spectrum that includes the following points: eased tensions; cold war; crisis/prewar mobilization; local war involving one superpower; U.S.-Soviet limited conventional war; global conventional war; limited use of nuclear weapons; general nuclear war; and post-nuclear conflict. A state's relative strengths and weaknesses are likely to change from point to point along the spectrum, as will the relative importance of various factors, thus shifting the balance of power.



The peacetime/wartime approach points to major differences between U.S. assessments and Soviets and Chinese perspectives on the balance of power. U.S. analyses of a Soviet-American nuclear war generally focus on the outbreak of war and the evolution of nuclear exchanges. The Soviets and Chinese, on the other hand, focus on how the war would end or would evolve into a protracted conventional conflict to determine control of Eurasia. For this reason, they emphasize the balance of power at the far end of the continuum and its impact on their balance of power positions in peacetime as well as at lower levels of conflict.

Section II assesses Soviet and Chinese approaches to analyzing the balance of power differ dramatically from U.S. approaches. Unlike Western assessments, the Soviets and Chinese examine developments in the strategic environment from a balance of power perspective that stresses economic, political, psychological and other non-military factors. The relative importance of these factors are seen as varying at different levels of conflict, from prewar crisis through post-nuclear recovery. Both Soviet and Chinese strategies seek to use non-military factors to shift the balance of power in their favor in peacetime and wartime.

The Soviets and Chinese see economic factors as contributing significantly to a state's ability to mobilize resources for war, to sustain production and distribution in wartime and to restore

war is politically "unjust."

Soviet writings assert that the psychological damage to the enemy's troops and population after a nuclear attack may be decisive--thus providing advantages to the country that employs nuclear weapons first. According to Soviet analysts, the psychological impact of a nuclear strike may be even greater than the material damage resulting from the nuclear explosions.

Both Soviet and Chinese analysts argue that preparing the population for war and strengthening troop morale in peacetime, can diminish if not prevent psychological disorientation in war, including a nuclear war.

The Soviets stress that military factors can be decisive in war, especially when military force is used to launch a surprise attack. The Chinese, on the other hand, say that while a surprise attack can provide an attacker with an initial advantage, correct warfighting tactics can shift the balance of power in favor of a weaker defender.

The Soviets perceive their position in the Sino-Soviet balance to be least favorable in a prolonged conventional conflict with China or in the aftermath of a U.S.-Soviet nuclear war. At lower levels of conflict the Soviets have more viable options for use

the means of production after a nuclear war.

Chinese analysts say that the nature and organization of the Soviet economy would provide advantages over the United States in the initial stages of a war. One Chinese expert interviewed in Beijing in June 1983 argued that every economic decision in the Soviet Union is made only after careful determination of its wartime significance.

The Soviets perceive that the relative backwardness and decentralization of the Chinese economy would provide China with advantages over the Soviet Union in a protracted war. These Chinese advantages would be especially pronounced in a U.S.-Soviet global nuclear war in which the Soviet Union was rendered economically and technologically equal or inferior to China. In this "worst case," the Soviet Union would be vulnerable to Chinese attack and would require large reserves of military forces to defend its territory and sufficient economic resources to ensure the slower recovery of China.

Soviet and Chinese analysts emphasize that the strength and "resoluteness" of domestic support for a country's war aims can have a critical impact on the course and outcome of a military conflict. A favorable position in the military balance will not necessarily ensure victory for the aggressor, they argue, if the

of force against China. But these options would also risk highly adverse international reaction and would not necessarily achieve Moscow's political objectives.

Section III assesses the implications for the United States of Moscow's concern about the threat that China poses to Soviet security. The Soviet view of the "China threat" may play a more significant role in U.S. deterrence of nuclear war with the Soviet Union than is generally recognized. Even if the Soviets believed they could survive a nuclear war with the United States--and thus calculated that risking nuclear conflict would be a viable option in extreme circumstances--they might still believe that they faced "assured defeat" in a protracted struggle with China in the aftermath of the U.S.-Soviet nuclear war.

In the post-nuclear struggle for control of Eurasia following U.S.-Soviet global war, the Soviets would be concerned not only with eliminating Chinese nuclear weapons, but also with destroying China's conventional forces, command and control facilities, economic recovery assets and political and social control structure. To deter China from exploiting the vulnerabilities of a crippled Soviet state, or to attack China during or control structure. To deter China from exploiting the vulnerabilities of a crippled Soviet state, or to attack China during or after nuclear war with the U.S. would require Moscow to reserve

thousands of warheads on survivable strategic and theater nuclear systems.

U.S.-Chinese strategic and military cooperation would benefit Washington as well as Beijing by enhancing deterrence of Soviet involvement in both lower and higher levels of conflict. The aim of this cooperation would be to affect Soviet perceptions of the balance of power by maximizing Moscow's concern about the possibility of effective U.S.-Chinese wartime cooperation.

Deterrence of Soviet actions against third countries, such as an invasion of Iran, could be strengthened by the prospect of a coordinated Sino-American response that increased the danger to Moscow of both horizontal and vertical escalation of conflict.

China's strategic alignment with the United States is determined by long-term geopolitical realities: Chinese leaders will continue to seek a counterweight to Moscow's superior military forces arrayed against China by developing ties with the more distant and less threatening U.S. The scope of these ties and the pace at which China will seek to develop them will likely depend on Soviet behavior and political relations between Beijing and Washington. Even in a period of tension in Sino-American relations and eased Sino-Soviet tensions--including a thinning out of Soviet troops on the Sino-Soviet border or confidence

building measures between Beijing and Moscow--Chinese leaders are unlikely to be convinced that the Soviet Union no longer poses a threat requiring a counterbalancing strategy.

Section III also examines the political and military implications of different outcomes of U.S.-Soviet negotiations affecting INF deployments in the Far East. The failure of the U.S. and the Soviet Union to negotiate an INF agreement would provide Moscow with two options: continuing its buildup of SS-20s in the Far East to increase political pressure on Tokyo and Beijing while enhancing its military capability in the region, or unilaterally freezing SS-20 deployments in the region as a gesture aimed at dividing Beijing and Tokyo from the United States. The U.S. would likely benefit politically in the short run from a continued SS-20 buildup but its position in the military balance might be weakened in the long run if no steps were taken to match Soviet INF deployments in the Far East. A Soviet freeze on its SS-20 deployments would likely improve the Soviets' political position in the peacetime regional balance--and consequently damage the U.S. position--and enable Moscow to devote more resources to strengthening its military capability vis-a-vis the United States.

An outcome of the INF negotiations that leads to reductions of

SS-20s in the Far East would be most favorable to the U.S. It would enhance Washington's influence in the region and strengthen the U.S. position in both the peacetime and wartime military balance. A INF agreement that limits deployments only in the European theater, implicitly allowing the Soviets to transfer SS-20s from the west to the east would likely damage U.S. relations with China, Japan and other Asian states and would weaken the U.S. position in the regional balance even if Washington's global position were strengthened. Such an outcome would raise doubts in Beijing and Tokyo about the ability of the U.S. to enhance the security of its Asian friends and allies.

PREFACE

The authors have previously examined Soviet and Chinese security views in a report for DNA, entitled Soviet and Chinese Strategic Perceptions in Peacetime and Wartime, 31 October 1982, contract number DNA 001-81-C-0293.

TABLE OF CONTENTS

Section	Page
Summary.....	iii
Preface.....	xi
1 A New Approach To Analyzing The Balance Of Power.....	1
1.1 Eased Tensions.....	10
1.2 Cold War.....	11
1.3 Crisis/Prewar Mobilization.....	12
1.4 Local War Involving One Superpower.....	13
1.5 U.S.-Soviet Limited Conventional War.....	15
1.6 Global Conventional War.....	16
1.7 Limited Use of Nuclear Weapons.....	18
1.8 General Nuclear War.....	21
1.9 Post-Nuclear Conflict/Recovery.....	22
1.10 Transitions On The Peacetime/Wartime Spectrum.....	24
1.11 Implications Of The Framework.....	27
 2 Soviet And Chinese Views Of Military And Non-Military	
Factors In The Balance Of Power.....	31
2.1 Economic Factors In The Balance Of Power.....	33
2.2 Political Factors In The Balance Of Power.....	41
2.3 Psychological Factors In The Balance Of Power.....	47
2.4 Military Factors In The Balance Of Power.....	55
2.5 The Peacetime/Wartime Spectrum And The Sino-Soviet	
Balance of Power.....	66

TABLE OF CONTENTS (Concluded)

3	Implications For The United States.....	76
3.1	China And Deterrence Of The Soviet Union.....	77
3.2	U.S.-Soviet INF Negotiations And The Far East.....	85
3.3	Other Implications.....	97
4	List Of References.....	100

SECTION I
A NEW APPROACH
TO ANALYZING THE BALANCE OF POWER

The peacetime/wartime framework introduced in this volume is intended to provide a new analytical approach for assessing the balance of power and other powers' perceptions of the balance of power. The peacetime/wartime approach to analyzing the balance of power accounts for the changing significance and weight of various non-military and military factors as the strategic environment changes along a peacetime/wartime spectrum from eased tensions to nuclear and post-nuclear conflict. This approach broadens the scope of defense analysis--both the range of factors and the time frames considered--to provide a more comprehensive assessment of the balance of power. The peacetime/wartime framework is intended to supplement, not substitute for, traditional assessments of the balance of military forces. It should assist analysts and policy makers in evaluating the significance and implications of military balance assessments.

Although the balance of power is often discussed as if it were something tangible, it is only a concept for assessing the relative strengths of two or more states or coalitions of states. There is no single, valid approach or model for assessing the balance of power. There is not even agreement on what factors should be included in the balance of power or on how to judge their relative importance. Yet, national leaders make key

decisions of war and peace based on their perceptions of the balance of power. Perceptions of an imbalance of power are often grounds for using force: the leadership of a nation may perceive opportunities in a favorable balance of power to achieve a political objective by launching a war; or, they may foresee their balance of power position eroding in the long term and thus decide to use force while conditions still offer a chance of success; finally, the leaders of one state may launch a preemptive attack against another state which they perceive to be preparing to take military action that would shift the balance of power against them.

Typically, Western assessments of the balance of power are static and do not address the possible impact of a change in the strategic environment on the balance. Sometimes these assessments are reduced to analyses of the balance of military forces. These military balance assessments are frequently based on static measures of troops and equipment or expanded only to include calculations of unit effectiveness and other qualitative military factors. Dynamic analyses based on war games or simulations of engagements are also sometimes used to measure the military balance, but these, too, are narrow in their scope as well as in their assumptions about both wartime and peacetime factors. [1]

Even in a strictly military sense, these approaches to the balance of forces are highly unreliable for estimating the wartime balance. The transition to war, for example, may occur

through a surprise attack--an attack for which the defender is not fully prepared despite advance warning--that almost instantly changes the balance of military forces. A large portion of the defender's forces may be neutralized in the first hours or minutes of the war without similar losses by the attacker, thus dramatically upsetting the military balance that existed prior to the outbreak of conflict. Surprise attack has been a frequently used tactic in the last half a century--such as the German invasion of the Soviet Union, the Japanese attack on Pearl Harbor in World War II and the Egyptian attack on Israeli forces that launched the 1973 Middle East War. Military analysts and planners realize that surprise attack can sharply shift the balance of forces and military commanders try to prepare for a "bolt out of the blue," but little is done to account for surprise in assessments of the military balance.

Traditional balance of power assessments are insufficient not only because they do not account for surprise attack and because they focus almost exclusively on the order of battle. They also fail to include basic qualitative military factors such as training, leadership, morale, readiness, and combat sustainability. In addition, when geographical factors are considered, traditional assessments are limited to assessing the regional order of battle, as are most assessments of the U.S.-Soviet military balance in the Persian Gulf, for example. More importantly, traditional assessments do not include

geostrategic, political, diplomatic, economic, and psychological factors and the perceptions of these factors by other powers. These factors are difficult to quantify but they may be decisive in determining the likelihood, course and outcome of conflict. They also may change in character and relative importance at different points along a peacetime/wartime continuum. This "continuum" approach examines shifts in the balance of power in changing strategic environments ranging from eased tensions through crisis/mobilization to limited conventional war and finally to post-nuclear conflict. Two examples illustrate the peacetime/wartime approach:

* It is often argued that the United States has important advantages in the balance of power vis-a-vis the Soviet Union in the military strength, complementarity and political significance of its allies which comprise a coalition of states stretching from Japan to Western Europe. This U.S. "encirclement" of the Soviet Union has created anxiety in Moscow while enabling the Soviets' apprehensive neighbors to counterbalance growing Soviet power. The total economic and military power of the U.S.-led coalition exceeds that of the Soviets' coalition by a wide margin. U.S. allies and friends make major contributions to the coalition in economic strength and military power. The Soviets' allies, on the other hand, are often an economic burden on the Soviet Union and contribute less to their alliance's total military capability than do U.S. allies.

The balance of power in wartime, however, might be assessed very differently. The U.S.-led coalition might be unable to act collectively, with one or more nations refusing to enter a conflict or even denying the U.S. access to bases or other facilities located on their territory. Alliance wartime decision making might be a major obstacle to effective military action, especially if confronted with a large-scale Soviet mobilization, or with the need to decide whether to use tactical or theater nuclear weapons in response to a Soviet attack. The limited standardization and inter-operability of NATO weapons systems could significantly weaken the coalition's warfighting capability.

Soviet peacetime weaknesses, on the other hand, might prove to be wartime strengths. Moscow, unlike Washington, relies primarily on forces directly under its control and dominates alliance decision making--both factors which would enhance its ability to quickly mobilize for war and to launch preventive or preemptive surprise attacks. Although the Soviet Union's overseas allies such as Cuba and Vietnam could be greater liabilities than assets in wartime, their security and cooperation would not be required for Moscow's war effort in the vital areas on its periphery. For Washington, on the other hand, the wartime cooperation of its overseas allies would be essential and their security would be a primary motivation for U.S. military action.

* Economic factors and their significance in the balance of power might also be viewed differently in peacetime and wartime. The overall size, technological dynamism and global importance of the U.S. economy is often contrasted with the smaller, more stagnant, inefficient, and backward Soviet economy which relies heavily on foreign technology. The Soviets' excessive peacetime allocation of resources to defense in preparation for wartime contingencies has become an increasingly important contributor to stagnation of the civilian economy, thus weakening Moscow's position in the overall peacetime balance of power. The Soviets' massive preparations for war also have had a counterproductive peacetime political effect on their neighbors and the United States by undermining Western support for detente.

The Soviet Union's relative backwardness and inefficiency, however, may provide wartime economic advantages, as might also its relative resource self-sufficiency and low overall dependence on world trade. The Soviets would have other advantages as well, including a highly centralized command economy, a large production base for heavy industry, low expectations of Soviet consumers, and a political and military control structure for crisis mobilization that extends down to the local level of the society--all of which might enable the Soviet Union to increase its military production more rapidly than could the United States.

Two historical examples illustrate that the perception of leaders that economic and other non-military factors would lead

to an unfavorable shift in the balance of power can profoundly influence calculations to initiate war:

* In 1941, Japanese leaders perceived an inevitable conflict in the Pacific with the United States. After detailed assessments, they calculated that postponing the war would lead to deterioration of their position in the balance of forces and worsen the odds of a favorable outcome for Japan. A study done for the Japanese Navy's General Staff in August 1941 concluded that the U.S. industrial advantage gave Washington a war potential seven to eight times greater than Japan's. [2] The study envisioned Japanese economic strength gradually being undermined by the U.S. petroleum and scrap metal embargo instituted the previous month and predicted that the U.S. would overtake Japan in the peacetime naval race in two years. The Navy minister argued a few weeks before the surprise attack on Pearl Harbor that if the war lasted more than two years, Japan would probably lose because of its relative economic weakness. [3] Japanese leaders calculated that the military balance could be quickly shifted sharply in Japan's favor by a surprise attack on U.S. forces in the Pacific, including the U.S. fleet in Pearl Harbor. And they hoped that this military action would not lead to an all-out, protracted war with the United States--which Japan could not win--but rather to a favorable political settlement with Washington, which the Japanese thought would cut its losses rather than fight. This would have allowed a return to a point

on the peacetime end of the spectrum with an enhanced Japanese position in the balance of power. But Tokyo miscalculated the American response to Pearl Harbor, largely because it inaccurately assessed the psychological and political reaction in the U.S.

* Hitler similarly miscalculated the ability of Soviet leaders to mobilize the Soviet population to exploit the country's potential economic and military strength and ultimately to tilt the balance of power against Germany. Like Japanese leaders, Hitler judged war to be inevitable and thought the balance of power might shift unfavorably if war were postponed. He foresaw Germany's position eroding due to the military buildup underway in the Soviet Union and the likelihood of the U.S. joining the war and the Allies opening a second front. [4]

These examples demonstrate the importance of distinguishing between peacetime and wartime strategic environments in analyzing the balance of power. They also show that economic, technological, political, psychological, geographical and non-quantitative military factors can affect the balance of power in different ways--and to varying degrees--in each strategic environment along the spectrum. The peacetime/wartime spectrum pictured below identifies the strategic environment at the lower end as "eased tensions" and, at the upper end, as post-nuclear conflict. In between these strategic environments are various gradations of conflict:

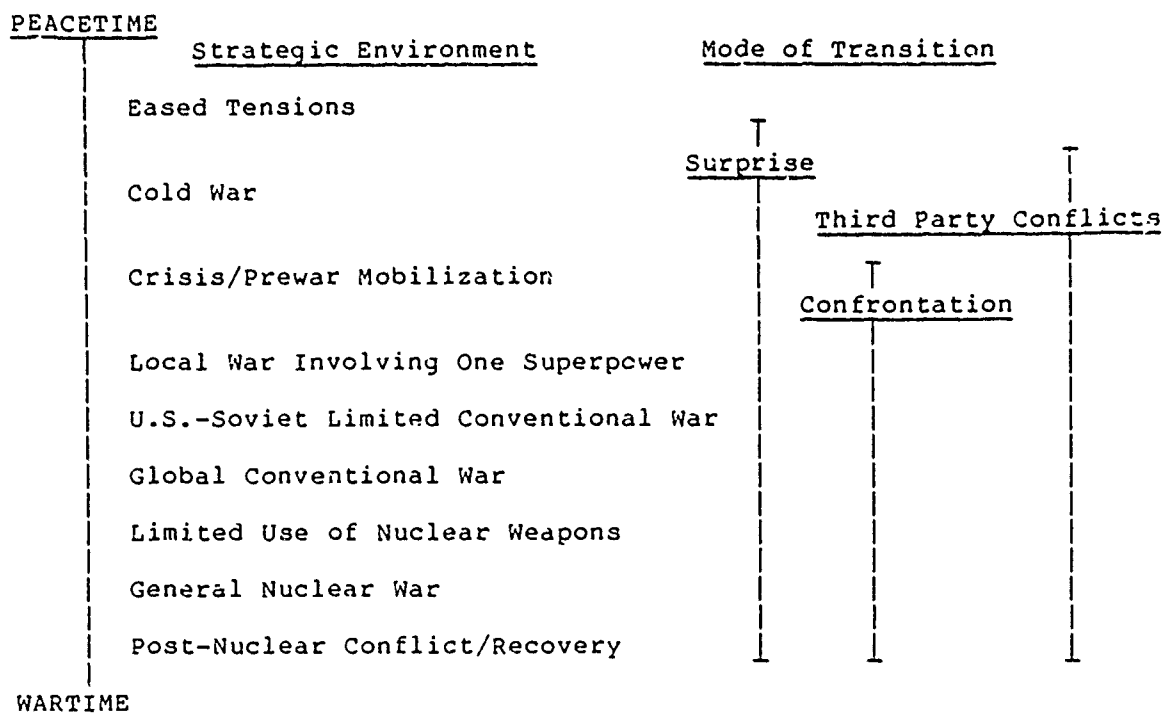


Figure 1. U.S. Soviet peacetime/wartime interaction.

The above spectrum is intended only to illustrate application of the peacetime/wartime approach to analysis of the U.S.-Soviet balance of power--the most important and demanding case for analysis since only the United States and the Soviet Union could engage in either global conventional war or global nuclear war. But this approach could be applied in a more limited manner to assess perceptions of the balance of power between two or more other powers.

The most significant economic, political and military factors for achieving national goals and protecting national interests may vary along the spectrum. Since not only the rela-

tive importance of various factors changes, but the strengths and weaknesses of a given state also change, the balance of power is likely to shift from point to point along the peacetime/wartime spectrum.

1.1 EASED TENSIONS.

Some states may seek to reduce tensions primarily to redress elements in the balance of power--such as investment in the civilian economy--that were weakened or neglected at other points on the spectrum. A state may seek a prolonged peaceful period during which it can reduce military spending to concentrate more resources on strengthening its economic base for a future military buildup. After a relatively stronger position is achieved, the leaders of the country might decide they had significant advantages that could be exploited by escalating to a further point along the peacetime/wartime spectrum. The leadership might then pursue a more aggressive foreign policy that risked increasing tensions or even military conflict. Thus, "eased tensions" may not be the primary goal of a state's domestic and foreign policy, but rather simply a means to achieving other, more important national objectives, as many U.S. critics charge was the aim of the Soviet Union's detente strategy. The Soviets allege that the goal of China's Four Modernizations, which assigns a low priority to defense modernization, is to build the economic base for a massive

buildup of Chinese military capabilities which will then be used to threaten China's neighbors. Despite such suspicions, economic, technological and political factors may be perceived by both political leaders and the general public in a period of relaxed tensions as more important than strictly military factors in the balance of power--and these factors may have a greater impact on a nation's international position.

1.2 COLD WAR.

Since the end of World War II, the "cold war" strategic environment has been a point on the spectrum to which the international situation has returned from either points of eased tensions or crises and confrontations. Third party conflicts, such as in the Middle East, Korea, Vietnam and the Horn of Africa, have heightened tensions between the superpowers, but both Washington and Moscow have sought to return to the "cold war" point on the spectrum rather than escalate to direct military conflict. For example, in the aftermath of the most serious U.S.-Soviet confrontation--the 1962 Cuban missile crisis--both powers sought to reach a modus vivendi at a lower level of tension. One result was that the U.S. and the Soviet Union signed their first arms control agreement, the 1963 atmospheric test ban treaty (which also included Britain), and agreed to establish the "hot line" between Washington and Moscow.

In a cold war strategic environment, political leaders often measure the military balance relative to some quantitative measure of superpower "parity." Parity is seen primarily as a political concept--codified in strategic arms control agreements--that symbolizes political and military equality and mutual deterrence between the United States and the Soviet Union. But it does not measure comparative warfighting capabilities--or the wartime balance of power including non-military factors--should deterrence fail.

1.3 CRISIS/PREWAR MOBILIZATION.

A major U.S.-Soviet military conflict would likely follow a period of crisis and mobilization. In this period, the elements of national and coalition power considered most important to prewar or intrawar deterrence or to ultimate "victory" in a global conflict would be perceived as very different than in the current peacetime environment. The shifting elements of the balance of power in the crisis/prewar mobilization period would be judged by their role in minimizing the effectiveness of the adversary's planning strategy and mobilization of assets, and in maximizing the deterrence and warfighting position of the United States. This would include such political factors as the ability to prevent neutralization of allies and friends and to ensure rational wartime allocation of the total military potential of the coalition. An important economic factor would be the

capability to mobilize industrial capacity and human resources for a protracted conflict and have maximum forces available at the time the war started.

1.4 LOCAL WAR INVOLVING ONE SUPERPOWER.

A local war--in the Middle East, Persian Gulf, Far East or elsewhere in the Third World--is probably the most likely catalyst for a U.S.-Soviet conflict, especially if each side sees vital interests at stake affecting the balance of power that could be jeopardized by failure to act. So far, both sides have backed away from military conflict and have sought diplomatic solutions in such crises, as in the 1962 Cuban missile crisis and the 1973 Middle East war. In cases where one of the superpowers had committed its own military forces to the conflict--such as U.S. military intervention in Korea and Vietnam and the recent invasion of Grenada, and Soviet intervention in Afghanistan--the other side has been circumspect in its military activity and has avoided a confrontation.

Local wars involve complex cost-benefit calculations of the balance of power, especially for the superpowers. They face economic, political and military risks in both action and inaction. They must estimate the impact of the conflict on their balance of power position along the entire peacetime/wartime spectrum. The conflict itself could become an intentional or unintentional transition to another point on the spectrum:

escalation to a U.S.-Soviet military confrontation, or return to a peacetime strategic environment with an enhanced or weakened position in the balance of power. In some areas like the Middle East, both superpowers perceive vital national interests to be at stake and thus the risk of U.S.-Soviet confrontation is high. In other areas, however, the security interests of one superpower are greater than those of the other--such as U.S. interests in Grenada and Soviet interests in Afghanistan--direct intervention by one superpower may not risk counter-intervention by the other. Nevertheless, such unilateral military action by one superpower may affect the balance of power in other ways--from successfully weakening the position of its adversary to undermining its international political position. The Soviet Union, for example, suffered apparently unanticipated setbacks internationally--especially in its influence in the Third World--after the Afghanistan invasion. Failing to intervene with force also can be perceived as potentially damaging to a superpower's economic, political or strategic position. U.S. policymakers asserted in the 1960s, for example, that failure to intervene militarily in Vietnam would lead to unchecked Chinese expansionism in Asia. Estimates of the consequences of non-intervention can prove inaccurate, however, such as predictions that cutbacks in petroleum supplies as a result of the "loss of Iran" or the Iran-Iraq war would have drastic effects on Western economies.

1.5 U.S.-SOVIET LIMITED CONVENTIONAL WAR.

Although American and Soviet forces have never engaged each other in conventional combat, much less in a global nuclear war, perceptions of U.S.-Soviet war--including post-nuclear conflict--have provided the basis for defense strategy and planning in both Washington and Moscow for nearly forty years. Leaders on both sides have feared that any conventional conflict between the sides' forces could escalate to a general nuclear war. But they have also had to plan for the possibility of a conventional war that was kept limited--especially outside Europe--and for a conventional phase of a larger war. Assessment of the balance of power in such conflicts draws on a wide range of qualitative factors as well as on estimates of the balance at other points along the peacetime/wartime spectrum. Political factors would be particularly crucial, including solidarity of the opposing coalitions and domestic support for the state's wartime mobilization efforts. Economic strength would be tested also as the two sides sought to rapidly resupply the forces at the front and prepare for a larger scale conflict. Leaders in both countries--and other states--would be estimating the balance of power at all points along the spectrum: they would be concerned with the risks of peace as well as the dangers of a broader war.

An additional factor could be changing political objectives for the use of military power. Initially, military forces likely

would be committed to achieve a relatively limited political objective, which might not include direct confrontation with forces of the other superpower. But the course of war can lead to changing political as well as military objectives. In the fall of 1983, for example, the U.S. had nearly 2,000 Marines in Lebanon as part of a peacekeeping force, while the Soviet Union had some 7,000 military advisers in nearby Syria. The original limited political aims of the two sides, however, would immediately become subordinated to much larger objectives and concerns in the unlikely event that the volatile situation led to a U.S.-Soviet military confrontation. Although the fear of escalation could lead to a quick settlement, such a limited conventional conflict also could quickly expand geographically beyond the Lebanon-Syria battlefield to become a much larger war.

1.6 GLOBAL CONVENTIONAL WAR.

It is possible that a conventional conflict could escalate horizontally rather than vertically to become a global non-nuclear war. One or both of the superpowers could seek to exploit the other's geographical, political or economic weaknesses and vulnerabilities by opening additional fronts or threatening to do so to force de-escalation on the initial front where their forces might be losing. In a U.S.-Soviet limited conflict in the Persian Gulf, for example, the Soviets might mobilize their troops in East Germany to prevent deployment of

U.S. ground and air forces from Western Europe to support American forces in the Gulf. A Warsaw Pact alert could also be a political tool for coercing European NATO countries to pressure the U.S. to de-escalate the conflict. The U.S., on the other hand, could make military moves in Northeast Asia to heighten Soviet concerns about fighting on the Far Eastern front.

A major goal of Soviet diplomacy and strategy is to prevent political encirclement in peacetime and two-front conflict in wartime. During World War II, the Soviets sought to prevent the Japanese from opening a second front against them in the Far East. The Soviets launched major attacks on Japanese forces in Manchuria in 1938 and 1939 to warn Japan against invading the Soviet Union. Nevertheless, the Soviets had to maintain some forty divisions in the Far East throughout the war to deter the Japanese. And Moscow was not willing to open a second front against Japan until the war had ended on the western front.

Since the late 1960s, the Soviets have structured their forces to fight on two fronts simultaneously. But Moscow is not confident it can prevail in a two-front war against its adversaries in the east, including China, Japan and the United States, and against NATO in the west. Soviet engagement in a limited conventional war with the United States would not only risk U.S. escalation to the use of nuclear weapons--in itself a major deterrent to further conflict--but it would also raise the specter of geographical and political widening of the war to include combat

With China as well as with NATO. Thus, even if the Soviet leadership concluded that the balance of power favored the Soviet Union at one point on the spectrum--such as limited conflict in the Gulf where Moscow might have logistical and even political advantages--they might judge that expansion of the war to other theaters of conflict would shift the balance against them.

1.7 LIMITED USE OF NUCLEAR WEAPONS.

Nuclear weapons might be used in a variety of contingencies with very different intentions and consequences. These could range from the limited use of tactical nuclear weapons (TNW) to selective, controlled nuclear strikes with strategic weapons against the homelands of the superpowers. In the former case, the use of nuclear weapons might be restricted to the battlefield; in the latter case, however, the use of nuclear weapons might escalate quickly into a general nuclear war.

In a conventional war, the side that was losing would have an incentive to initiate battlefield use of TNW in an attempt to instantly invalidate the prevailing military balance almost instantly. There might also be an incentive to use TNW as part of a surprise attack into enemy territory, especially if the peacetime military balance favored the defender. In any case, TNW might be used to affect the outcome of a conventional theater conflict rather than as a retaliatory weapon to punish the attacker by creating "unacceptable damage" on the attacker's

homeland.

Although TNW might be employed as if they were just another conventional weapon, the decision to use even small-yield battlefield nuclear weapons would be perceived by national leaders as having far greater significance than that indicated by military factors. The use of TNW, while possibly having a decisive effect on the immediate course of the war, would also risk escalation and would have profound political and psychological effects on adversaries and allies. Western Europeans, for example, could react to NATO use of TNW against a Soviet invasion by calling for neutrality or demanding that the U.S. accept Soviet terms for a settlement to avoid large-scale destruction of their societies. Such disarray in the Western alliance could have a profound effect on the future course of the war and undermine Washington's *raison d'etre* for continuing to fight in Europe. The Soviets might perceive this as a U.S. weakness in the balance of power to be exploited should a U.S.-Soviet conflict reach such a level. Moscow might thus win the war for Europe without escalation to strategic nuclear war, despite the "coupling" of U.S. nuclear forces in Europe to U.S. central strategic systems.

The limited, selective use of strategic nuclear weapons (or INF) against strategic targets by the superpowers would have very different implications than would battlefield use of TNW. Such strategic nuclear strikes would immediately change the character

of the war and the relative importance of deterrent factors in the balance of power. The primary goal for the Soviet Union would become survival of the homeland. The forward deployment of troops would become a secondary matter to Moscow, even if the conflict began with a Soviet ground force attack into West Germany. As the war escalated--or if it were initiated with limited strategic nuclear strikes--it would likely be a contest between the superpowers in which internal political, psychological, economic, technological and organizational factors would be considered essential in the balance of power. International factors, on the other hand, such as the strength and solidarity of opposing coalitions, might be perceived as less significant than they would be at points of lesser conflict on the peacetime/wartime spectrum.

Limited strategic nuclear attacks would likely be the first point on the spectrum at which the homelands of the two superpowers would come under direct attack. One of the key factors in the balance of power that would become especially crucial at this point would be the ability of the opposing sides to mobilize their societies to sustain a war effort across the spectrum of conflict, even through a protracted nuclear war into a post-nuclear contest for control of territory. In a protracted World War II-style war effort, the United States would have a smaller defense production base and far greater dependence on foreign production and components than the Soviet Union, despite

its larger, more advanced and more dynamic economy. The U.S. also may have far less ability than the Soviet Union to sustain mobilization of its society and economy once the war touched its home territory.

1.8 GENERAL NUCLEAR WAR.

Limited strategic strikes would likely lead to rapid de-escalation through a political settlement or would escalate to a general nuclear war. While the destruction on both sides might be so severe in the aftermath of the initial massive nuclear exchanges that no organized war effort could be maintained, both sides nevertheless plan for the possibility of a protracted nuclear war.

American analyses of nuclear war, however, generally focus on how nuclear war would start and the evolution of nuclear exchanges. Most analysts are doubtful that U.S. society could survive a general nuclear war and in any case they do not foresee a postwar struggle against hostile neighbors for territorial control. The Soviets, on the other hand, focus on how the war could be survived and how it would end or evolve into a protracted conventional conflict to determine control of Eurasia. From the Soviets' perspective, geographical, political, psychological and economic factors could determine the final outcome of the war. The Soviets would see themselves as having advantages over the U.S. in their ability to maintain social and

political control and economic production under conditions of nuclear warfare. But the Soviets also see they have a major disadvantage in the presence of hostile states on their borders--especially China--which might seek to exploit Soviet vulnerabilities during or after a U.S.-Soviet nuclear war.

1.9 POST-NUCLEAR CONFLICT/RECOVERY.

The Soviets thus perceive that following a U.S.-Soviet nuclear war, the Soviet Union would be at a disadvantage geographically, but would be politically and economically better prepared than the United States for post-nuclear recovery and continuation of the war effort. While Soviet leaders have raised the prospect of nuclear war destroying all civilization, Soviet internal propaganda stresses the possibility of surviving the rebuilding after a nuclear war. Soviet leaders point to the aftermath of World War II as a model for post-attack recovery. Harriet and William Scott note that the Soviets have made advanced preparations for exercising control in wartime, and conclude that based on "the effectiveness demonstrated by the Soviet control structure in the past, it is possible that under certain conditions the Soviet Communist Party system might survive a nuclear exchange and accomplish post-attack recovery."

[5] The Scotts argue that the relative backwardness of the Soviet economy might prove to be an advantage over the United States for postwar recovery and that even some areas of military

technology, such as communications systems, also may give the Soviet Union an edge over the United States. The Soviet C3 system may actually be more survivable because it uses obsolete vacuum tube technology that is less vulnerable to EMP effects. [6] The Scotts also point out that the Soviet political and military control structure extends down to the local level and even has command over individual's resources, including automobiles, as well as control over publicly owned transportation facilities and equipment for wartime and postwar recovery efforts. [7]

While the Soviets may perceive that they have significant non-military advantages over the U.S. in a general nuclear war, they would also face far different strategic threats in the post-nuclear phase of conflict. The Soviet Union's advantages over its neighbors in the balance of power in peacetime and at lower levels of military conflict could suddenly evaporate as a post-nuclear struggle for control of Eurasia began with the Soviets' economic and military level reduced to that of their neighbors. The Soviets' primary concern at this point--and the concern of their peacetime "worst case" planning--would be the threat from the surviving Chinese. The Soviets' perceive China as having possible political, economic and psychological advantages over the Soviet Union in the balance of power in a protracted post-nuclear struggle. The Soviets argue, for example, that the relative backwardness and decentralization of

China's economy along with its huge population would enhance Chinese survivability and thus favor China in the post-nuclear balance of power. (See Volumes II and III for a more detailed discussion of the Soviets' perception of a Chinese threat.)

1.10 TRANSITIONS ON THE PEACETIME/WARTIME SPECTRUM.

Leaders of a particular state may seek to improve their nation's standing in the balance of power--or prevent it from deteriorating--by strengthening its position at a particular point along the spectrum or by moving to another point. In the former case, for example, the leaders could concentrate on modernizing the country's economy, improving its diplomatic position, altering the political mood at home or abroad, enhancing its military capability, or expanding the geographical area involved in the conflict. In the latter case, they might see advantages in changing the strategic environment--from launching or escalating a war to de-escalating a conflict or easing tensions.

The mode of transition from one point to the other may be "surprise"--from surprise diplomatic initiatives to surprise nuclear attack. The Soviets could achieve surprise in attacking Europe, for example, if disagreements within NATO about Soviet intentions in mobilizing their forces during a crisis--whether Moscow was planning a strike or taking defensive measures--precluded taking defensive steps that could blunt a surprise

attack. [8]

While surprise is a possible mode of transition from one point to another on the peacetime/wartime spectrum, the catalyst for such action could be a third party crisis or military conflict that created tensions between the superpowers. It also could result from a steady buildup of tensions over several bilateral and multilateral issues leading to a direct confrontation. In addition, the threat of shifting from peacetime to wartime--that is coercive diplomacy--could be used to affect changes in the peacetime balance of power.

A state could seek to shift the peacetime balance by changing the strategic environment from one of tension or crisis to one of eased tensions. The Soviets could create a diplomatic surprise, for example, by returning the Kurile Islands to Japan, which could have a dramatic impact on Japanese perceptions of the Soviet Union and could diminish support for Tokyo's U.S.-backed defense buildup. In a prewar crisis period, there would be a strong incentive for the Soviet Union to make sudden diplomatic concessions to China, Japan or Western European countries in an attempt to isolate the United States and quickly shift the global balance of power, or at least, to prevent a two-front conflict from developing. The transition back to cold war or eased tensions could also be negotiated between the superpowers or be the result of a negotiated settlement of a crisis involving third parties. On the other hand, creation of an environment of

tension and fear could be useful in gaining concessions in peacetime negotiations, such as Moscow's efforts in the fall of 1983 to frighten NATO countries into cancelling deployment of U.S. INF in Western Europe by raising the specter of dangerous Soviet countermeasures.

On the wartime end of the spectrum, a state could initiate a preventive war in response to a perceived deterioration in the military balance, or a preemptive strike to seize the advantage at a point of perceived imminence of war. The use of tactical nuclear weapons likely would invalidate the existing military balance at the moment they were used--whether in a surprise attack or in escalation of a conventional war. But their use also would affect other aspects of the balance of power and risk further escalation to use of strategic nuclear systems.

Third party conflicts--between two or more states other than the U.S. and the Soviet Union or also involving one of the superpowers--could change the strategic environment and the distribution of advantages and disadvantages of qualitative factors in the balance of power. The U.S. and the Soviet Union confronted each other as a result of conflict between their respective allies in the Middle East in 1973. At that time, the U.S. used the implied threat of escalation to U.S.-Soviet war--putting U.S. forces on a Defcon 3 alert--to force de-escalation of the conflict. The result was a return to a peacetime environment in which the regional balance of power had

been greatly altered. Washington used the threat of escalation to deter Soviet intervention and to pressure Israel to desist from efforts to destroy the Egyptian Third Army. The Soviets used the threat of intervention to deter destruction of the Third Army. Egypt used the attack on Israel to pave the way for a peaceful settlement of its conflict with Israel and thus enable them to regain control of the Sinai through negotiations, not force.

1.11 IMPLICATIONS OF THE FRAMEWORK.

The approach outlined here for analyzing the balance of power examines factors that are in fact considered by leaders and policy makers in an unsystematic and incomplete fashion and with little knowledge or understanding of how the leaders of other principal states view these factors and the overall balance of power. This peacetime/wartime framework should provide a new way of thinking about these factors and their inter-relationships, and provide policy makers and analysts a usable approach for evaluating them. It should also aid the policy maker or analyst in assessing the limitations of military balance analyses.

The peacetime/wartime framework is especially useful for evaluating Soviet and Chinese perceptions of the balance of power and their implications for the U.S. (see Sections II and III) because leaders and analysts in both countries use a similar framework for assessing the balance of power, developing stra-

tegies and making decisions. Not only are the approaches of the Soviets and the Chinese more comprehensive and systematic than most U.S. approaches, they also emphasize the evolution and outcome of conflict while American analyses focus on deterrence and the initial stages of war. Both the Soviet Union and China, for example, plan for protracted nuclear and post-nuclear war and thus their leaders are particularly concerned with assessing the balance of power at the far end of the continuum and estimating its impact on the balance of power and deterrence in peacetime or at levels of conflict short of global nuclear war.

The Soviets and Chinese also share a Marxist perspective in which conflict and change are viewed as "natural" phenomena with potentially positive outcomes. "Peace" and "eased tensions" are not ends in themselves nor are they permanent conditions. This is not to say that nuclear war or large-scale conflict is viewed as desirable, but simply that some forms of conflict are not necessarily considered undesirable--or unavoidable. "Unjust" or oppressive economic, social and political conditions, for example, are perceived as often leading to violent "national liberation" struggles in the Third World. The Soviet state was born out of the external and internal upheavals of World War I; the People's Republic of China emerged from civil war and war against a foreign occupier. Thus, from a Marxist perspective, "peacetime" and "wartime" are interrelated rather than dichotomous--just as the seeds of conflict exist in peacetime

conditions, a more just social order may emerge from war.

The peacetime/wartime framework should also be useful for analyzing other states' perceptions and assessments of the balance at various points along the peacetime/wartime spectrum, even if leaders and analysts in these states do not systematically assess the balance of power in a peacetime/wartime perspective as do the Soviets and Chinese. Such analyses would provide insights into both the assumptions behind the observed military, political, diplomatic and economic behavior of states and their possible actions at various points along the peacetime/wartime spectrum. This approach also should be useful for better understanding why other states decide to use military force--from coercive diplomacy to preemptive attack or preventive war.

Finally, this approach can be applied to specific situations of concern to defense planners and policy makers. The current complex U.S.-Soviet struggle over INF, for example, should be analyzed from a perspective that includes peacetime and wartime assessments of military, political, diplomatic and even economic factors. Decisions by leaders in both the U.S. and the Soviet Union--as well as in Western Europe, Japan and China--are not based solely on concern about the military balance but rather involve assessments of all the factors in the peacetime/wartime balance of power approach (see Section III). Another example where this approach could provide useful guidance for analysts and policy makers is in assessing the balance of power in a

possible U.S.-Soviet conflict in Iran. There have been many military balance assessments of this scenario, but a comprehensive examination of the evolution of such a conflict should involve estimation of the balance of power at all points along the peacetime/wartime spectrum as well as Soviet perceptions of the balance. Such an analysis would include determination of the critical factors affecting Soviet perceptions of the dangers and opportunities in invading Iran and the potential U.S. approaches to deterring and defending against such an attack. The results of this assessment might indicate that Moscow, while perceiving it had a sufficient military advantage to deter or defeat the U.S. in a conventional conflict in Iran, would nevertheless perceive itself to be at a serious disadvantage if the war escalated to the use of nuclear weapons or widened to include other powers.

SECTION II

SOVIET AND CHINESE VIEWS OF MILITARY AND NON-MILITARY FACTORS IN THE BALANCE OF POWER

Soviet and Chinese approaches to assessing the balance of power differ dramatically from approaches used by the United States. Both the Soviets and the Chinese stress the importance of non-military factors in the balance of power in peacetime and wartime and in determining the likely outcome of conflict. Military factors are important, they argue, but not necessarily decisive. A comprehensive analysis of the determinants of the balance of power, according to Soviet and Chinese analysts, must also include economic, technological, political, diplomatic, psychological, geographic and other factors. They also emphasize that the relative importance of those factors can change as a result of changes in the peacetime environment. The Soviets and Chinese systematically assess their own strength and weaknesses--as well as their adversaries'--at various levels of conflict along a peacetime/wartime spectrum from prewar crisis through post-nuclear recovery. These balance of power assessments provide the basis for Soviet and Chinese policies. A better understanding of assessments made in Moscow and Beijing can improve U.S. ability to predict and affect Soviet and Chinese actions. (See Section III)

This section examines Soviet and Chinese assessments of

factors affecting the balance of power (what the Soviets term "sootnosheniye sil" or "the correlation of forces" and the Chinese call "liliang duibi" or "comparative strength") in peacetime and wartime. The study draws on statements and writings by Soviet and Chinese officials, commentators and analysts. It is also based on extensive interviews by the authors with Soviet and Chinese analysts conducted during visits to the Soviet Union and China in June and July 1983. Most of the Chinese analysts interviewed candidly expressed their views and assessments of the relative importance of various factors in determining the balance of power between states--in peacetime as well as in wartime, and even in global nuclear war and post-nuclear war. In contrast to the Chinese, Soviet analysts were less inclined to discuss their views of the balance of power beyond the "cold war" and "crisis" points--either because they could not conceive of even limited use of battlefield nuclear weapons or global war between the U.S. and the Soviet Union, or because they opted not to discuss these views with foreigners. Most of the Soviet perceptions of the wartime balance of power were therefore gleaned from Soviet military writings which frequently analyze the significance of military and non-military factors in wartime, including under conditions of nuclear warfare. Ironically, publicly available Chinese writings, while often extolling the strengths of "people's war," only rarely assess the determinants of the balance of power in conventional

and nuclear war.

There is no "one view" of these issues in either Moscow or Beijing, and it has not been possible to systematically obtain Soviet and Chinese views of each factor at each point along the peacetime/wartime spectrum. Nevertheless, analysis of available data provides important insights into Soviet and Chinese thinking about the determinants of the balance of power on the spectrum from peacetime through wartime, including post-nuclear conflict. It also indicates Chinese and Soviet views on how to alter the enemy's perceptions about the strengths and weaknesses of a state or coalition of states and how to affect changes in the balance of power in wartime.

2.1 ECONOMIC FACTORS IN THE BALANCE OF POWER.

Both the Soviets and the Chinese stress the importance of economic factors in their assessments of the political and military strengths and weaknesses of states in peacetime and wartime. They point not only to the significance of the size of an economy, indicated by such measures as national income and resources available for the military, but also to the nature of an economy, including the "mode of production" (capitalist or socialist), technological level, and relative resource autarky. These factors, the Soviets and Chinese say, will affect a state's ability to mobilize resources for war and to sustain production and distribution in wartime. In addition to placing greater

emphasis on economic factors in their balance of power assessments than do U.S. analysts, the Soviets and Chinese see economic factors as largely determining a state's ability to restore the means of production and to continue the war effort after initial nuclear exchanges.

2.1.1 Chinese Views.

Chinese analysts suggest that a country's economic strengths and weaknesses influence its political and military position in the balance of power in different ways in peacetime and wartime. They focus much of their attention on analyzing the economic power of the Soviet Union--the main threat to Chinese security--relative to the economic power of the United States. Chinese analyses of the peacetime balance of power between the United States and the Soviet Union, for example, examine the respective rates of economic growth, GNP, labor productivity, industrial production (including quantity, quality, variety and utilization efficiency), rates of investment, stability of production output, management, technology level, natural resource base, agricultural production and hard currency reserves. [9]

Based on assessments of these peacetime economic indicators in the Soviet Union and the United States, the Chinese conclude that the U.S. economy is stronger. At the same time, however, they note that the Soviet economy, albeit smaller and more stagnant, has great long-term potential in its industry and

resources. They also argue that the Soviets could devote an even greater percentage of their economic resources to military purposes during peacetime as well as mobilize the economy to greatly increase military production in a prewar or wartime environment. In addition, they point to the Soviets' abundance of strategic resources, including energy, as an important peacetime and wartime economic strength.

On balance, the Chinese argue, the Soviets' wartime economic contingency capabilities are superior to the U.S. They note in particular that the Soviet Union would be able to mobilize its economy more quickly than the U.S. One Chinese expert on the Soviet Union, interviewed in June 1983, argued that every economic decision in the Soviet Union is made only after careful determination of its wartime significance. "In the Soviet Union, when investment is made in a project, they already have considered implications for war," he said.

A comparative assessment of U.S. and Soviet economic strengths and weaknesses is meaningful to Chinese analysts because they see Soviet strategy in a global context and argue that Soviet leaders would have to consider the global strategic implications of a military conflict with China. Any Soviet decision to attack China, therefore, would not simply be considered in a Sino-Soviet bilateral context. And since war with China could weaken the Soviet Union's economic as well as its political and military position in the U.S.-Soviet balance of

power, they argue that the whole weight of Soviet economic strength would not be mobilized against China alone.

Chinese analysts assert that although China must be prepared for various forms of Soviet attack, large-scale Soviet aggression against China is unlikely in all but the most extreme context of a global nuclear war. Thus, Soviet economic capabilities in peacetime, crisis, mobilization, and even conventional war vis-a-vis China are perceived to be less relevant than Soviet economic capabilities vis-a-vis the United States. In a nuclear conflict with the Soviet Union, the Chinese assert that they would have a superior economic base from which to sustain the war. They say that the decentralized and backward nature of the Chinese economy makes it difficult to destroy, and at the same time renders it capable of rapid rehabilitation following nuclear strikes. Therefore, they conclude, Chinese survivability after a global nuclear war would be superior to that of both superpowers.

The Chinese also argue that Soviet concern about this Chinese strength in the balance of power in a global nuclear war contributes to Chinese deterrence of the Soviet Union in peacetime. This view was expressed by Su Yu, a member of the Party's Military Affairs Commission, in a statement commemorating the 50th anniversary of the founding of the People's Liberation Army in which he declared that nuclear weapons "pose a much greater threat to the imperialist United States and social-imperialist Soviet Union countries whose industries and

population are highly concentrated. China's economic construction takes agriculture as the foundation and industry as the leading factor and adopts the principle of combining industry with agriculture, the cities with the countryside, large and medium-sized projects with small ones, and production in peacetime with preparedness against war," Su Yu added. "Thus it cannot be destroyed by any modern weapons." [10]

2.1.2 Soviet Views.

Many Soviet writings, including major statements on defense policy by Soviet leaders as well as books by military analysts, also stress the importance of economic factors in the balance of power. In their writings on Soviet strategy, they place a premium on "surprise attack" in any future war, and point to the need for a strong economy in peacetime that would be able to mobilize rapidly to support Soviet surprise offensives. Soviet Chief of the Armed Forces General Staff Marshal Ogarkov, in a March 1982 book entitled Always Ready to Defend the Homeland, emphasized the need to make economic, as well as military, preparations in peacetime for wartime contingencies. [11] Ogarkov cited the potential need for "a timely switch of the armed forces and the entire country to a war footing," adding that "in order to increase the military preparedness of the country, today as never before, it is necessary to coordinate mobilization and deployment of the armed forces and the entire

economy and particularly the use of human resources, transport, communications and energy to secure the stability and livability" of the Soviet Union.

While pointing to the likelihood that a "world war will be of comparatively short duration," Ogarkov noted the possibility of a protracted conflict in which the economy would be crucial to sustain the war effort. Pointing to the need to strengthen the links between the economy and civil defense to prepare for such a possibility, the Chief of the General Staff wrote that this is "one of the most important conditions to sustain the required levels of defense capacity for the entire country." Marshal Sokolovskiy, writing in the 1960s, similarly identified the need to prepare the Soviet economy to support a protracted war effort. "The war may drag on and this will demand protracted and all-out exertion of the army and people," Sokolovskiy wrote. "Therefore, we must also be ready for a protracted war and get the human and material resources into a state of preparedness for this eventuality." [12]

Soviet writings assert that productive capabilities necessary to satisfy wartime requirements must be created in peacetime. Soviet military analysts stress that while in previous wars a nation might have had an opportunity to substantially expand productive capacity after the outbreak of war, this would be unlikely in future wars which will involve the use of nuclear weapons. One Soviet analyst argued that in a

nuclear war economic factors would be decisive. The nature of nuclear war, he wrote, is such that its outcome will be "determined in the final account by the economy of the society and method of production, but not by what the economy will provide for war in wartime, but primarily by what it provides and is capable of providing in peacetime." [13]

To better prepare the economy in peacetime, Soviet analysts call for standardization between civilian and military goods and interchangeable equipment parts. They also encourage the development of self-sufficient economic regions to minimize strains on the national economy in wartime. Sokolovskiy, in Military Strategy, argues for the placement of critical industries underground. [14] Soviet writers also stress that food reserves must be maintained in peacetime in preparation for war. In discussions of the development of the economy, Soviet writers note that consideration must be given to wartime utilization of economic projects--including in the post-nuclear phase of war, in which restoration of the economy would be a primary concern of the Soviet leadership. Thus, for example, they argue that motor transport would more likely survive a nuclear attack than railway systems and should therefore be expanded. In addition, they say that fuel and oil transport should rely on pipelines which are the least vulnerable to nuclear attack. [15]

Soviet defense officials argue that the "scattered

placement" of productive forces provides the Soviet Union with wartime advantages. Marshal Grechko, when outlining the directives of the 24th Party Congress to the Soviet Armed Forces, stated that the dispersal of Soviet industry makes it "less vulnerable in the event that imperialism unleashes a nuclear missile war." The United States, because of its relative concentration of industry, is some three times as vulnerable to nuclear attack as the Soviet Union, according to Marshal Grechko. [16]

Socialist economic organization provides the Soviet Union with wartime advantages over the United States, the Soviets argue, because "the war potential of a state is not only measured by the amount of its resources but also by the degree of their availability for defense" and "by the flexibility of control of these resources." [17] Soviet writers cite the example of World War II when the Soviet Union "switched its economy to a wartime footing within a few months," while "the USA and Great Britain required from 1.5 to 2 years for this purpose and France failed to do it at all." [18]

The Soviets are apparently confident that their economic strength is far superior to that of China in both peacetime and wartime--but only if Moscow can attain its goals vis-a-vis Beijing in a short war. If the war becomes protracted, the Soviets face a possible superior Chinese ability to sustain conflict. The Soviets perceive that the relative backwardness and decentralization of the Chinese economy would provide China

with advantages over the Soviet Union. These Chinese advantages would be especially pronounced in a global war in which massive nuclear exchanges between the Soviet Union and the United States might leave the Soviet Union economically and technologically equal to or inferior to China. In this "worst case" scenario, the Soviet Union would be vulnerable to Chinese attack and would require large quantities of reserved military forces and economic resources to defend its territory and to ensure the slower recovery of China.

2.2 POLITICAL FACTORS IN THE BALANCE OF POWER.

In contrast with the United States which stresses the decisiveness of military factors, both Soviet and Chinese analysts emphasize the importance of political factors in determining the outcome of conflict. They point to the strength and "resoluteness" of a state's domestic support as significantly affecting its military potential and its ability to wage a war. Domestic support, the Soviets and Chinese argue, is determined largely by the nature of the war--whether it is by their standards a "just" or "unjust" war. An aggressor state, for example, will be fighting an unjust war that will ultimately lose popular support at home. The fight against the aggressor in the victim country, however, will be a just war that will be supported by the population. Wars fought for "national liberation" and "independence" are also viewed by both Chinese

and Soviets as just wars. In addition, they also say that those fighting a just war will receive international support while the aggressors will be isolated and opposed.

Soviet and Chinese analysts assert that the nature of the political system has a major impact on a country's ability to organize effectively before war and to sustain a war effort once the conflict begins. A state with greater centralized political decision making and bureaucratic control has advantages over a state with a more unwieldy political system which, for example, may not be able to quickly mobilize for war or to launch surprise attacks or preventive war. They also stress the importance of political factors in coalition warfare, but note that the degree of political unity of an alliance in peacetime--especially NATO or the Warsaw Pact--may not be a relevant indicator of cohesiveness in wartime.

2.2.1 Chinese Views.

In analyzing the evolving balance of power in any military conflict, the Chinese say that the just or unjust nature of the war will inevitably affect its course and outcome. Several Chinese analysts interviewed in June 1983 described the 1979 Soviet invasion of Afghanistan as an example of an unjust war. They said that because of the unjust nature of the war, widespread opposition to the Soviets had developed in the Soviet Union and internationally, weakening the Soviets' position. The

unjust nature of the war had strengthened Afghan internal opposition to the Soviet presence in Afghanistan, the analysts argued, and the Soviets had become bogged down in an unwinnable protracted conflict. A prominent Chinese journalist interviewed on Beijing television in early 1983 commented that "through three years of war, the Soviet troops have suffered heavy casualties and their morale has become lower and lower. The Afghan guerrillas, on the other hand, have summed up experience and improved their tactics. . . The Afghan people will certainly persist in their resistance war until the last Soviet soldier is driven from Afghanistan." [19] Besides noting the shifting balance of power within Afghanistan because of the unjust nature of the Soviet invasion and the just character of the resistance, the Chinese point to Soviet losses of political influence globally as a result of launching an unjust war. A Beijing Review commentary in August 1983 noted that Moscow's "unprecedented isolation makes it unlikely that the Soviet Union can restore its influence in the Third World after the Afghanistan incident as it did in the middle and late 70s. [20]

The Chinese also argue that the use of nuclear weapons in an unjust war would be perceived as unjust internationally and would strengthen the resolve of the country attacked. The country which uses nuclear weapons, Su Yu declared in his speech commemorating the 50th anniversary of the People's Liberation Army, will "arouse indignation and resistance from the people of

the country invaded and the world's people at large." [21] At lower levels of conflict, such as a Soviet conventional strike on China's industries in Manchuria, the Chinese also argue that aggressive Soviet action would provoke global opposition and that international assistance to China would be forthcoming. The possibility that other countries--especially the United States--would come to China's aid, these analysts acknowledge, is a key element in Chinese deterrence strategy in peacetime. [22]

Chinese analysts look in part to political factors in their assessments of Soviet strengths and weaknesses in peacetime and wartime. An authoritative analysis of the U.S.-Soviet balance of power by the foreign ministry's Institute of International Studies (IIS) noted that while the economic power of the United States exceeds that of the Soviet Union in peacetime, the socialist political system of the Soviets might provide them with advantages over the U.S. in crisis, mobilization, and wartime. The IIS analysis argued that the Soviet Union is "an extremely centralized country in terms of political power and thus it is able to centralize its finances, its materials or its manpower into any undertaking it chooses, thereby making surprising developments and as a result to a certain extent it is thus able to make up for shortcomings in other areas." [23]

Some Chinese argue that the Soviet Union's allies would prove unreliable in war, and that this Soviet political weakness would diminish Moscow's position in the wartime balance of power.

This view is not shared by all Chinese analysts, however. An expert on the Soviet Union interviewed in June 1983 argued that despite increasing East European opposition to "Soviet occupation of their countries," these states "will stand firmly with the Soviet Union when war breaks out" because they will perceive a common threat from the West.

2.2.2 Soviet Views.

The Soviets identify many of the same political factors pointed to by Chinese analysts, and similarly stress that these factors have a critical impact on the balance of power in peacetime and wartime. These factors also include the character of war--whether it is just or unjust. A Soviet military analyst, writing in Communist of the Armed Forces, noted that "dividing wars into just and unjust is very important." Just wars, he wrote, "are those which are liberating, directed at class or national liberation. . . . defending the people from outside attack and attempts to enslave them, to free colonies and dependent countries from imperialist oppression. . . civil wars. . . . and wars in defense of the socialist fatherland." Unjust wars, he continued, "are predatory wars organized by exploiting classes" whose "goal is to seize the territory of others, defeat and enslave other peoples and working classes." [24] Based on the just war objectives of the Soviet Union in any military conflict, according to the Chief of the Soviet Armed Forces

General Staff, Marshal Nikolai Ogarkov, "the Soviet Union and its allies possess certain advantages." These just war aims and the "progressive nature of the social and state order," he wrote in the Soviet Military Encyclopedia in 1979, provide the "objective possibilities for achieving victory," even in nuclear war. The "powerful coalition of socialist countries," wrote Soviet military leaders a decade earlier, will be "united by unanimity of political and military goals" in wartime. [25]

Soviet writers argue that the just or unjust nature of a war may be more important than other factors in determining the balance of power and the war outcome. A relatively strong economic capacity "does not necessarily bring about a major and sweeping increase in the state's international influence," wrote one military analyst. The political position of a state will be strengthened "only if its international efforts are in line with the progressive trends of world social development." The analyst pointed to the United States war with Vietnam as an example of an unjust war in which the economic superiority of the aggressor state did not lead to victory. [26]

Like Chinese analysts, Soviet writers assert that a centralized political system provides important wartime advantages. A Soviet military analyst discussing the complexity of modern warfare, argued, for example, that "the probability of using enormously powerful weapons over great distances and within a short period of time requires high mobility and exceptionally

centralized leadership." [27]

Soviet political-military spokesmen have argued that private ownership of property in a capitalist society renders it unable to create an effective civil defense system. They assert that private ownership would preclude the use of land, buildings, transport and other facilities necessary for a civil defense program. [28] By contrast, the Soviets say that the centralized nature of their own political system, with its widespread control over the nation's resources, makes possible the construction of a civil defense network that could be effective in some wartime scenarios.

2.3 PSYCHOLOGICAL FACTORS IN THE BALANCE OF POWER.

Unlike the United States, the Soviet Union and China assign importance to psychological factors in their deterrence and warfighting strategies and their assessments of the balance of power. Chinese deterrence strategy in peacetime includes psychological manipulation of the perceptions and emotions of the Soviet leadership by asserting Chinese willingness to fight despite their significantly inferior military capability. In wartime, the Chinese stress that troop morale and mass support would be important in attaining their war aims. More advanced weapons may enable China to "turn the tide" against the aggressor at an earlier stage in the war than with relatively backward arms, and thus lessen the cost of war to the society, the Chinese

argue, but advanced weaponry alone will not determine victory or defeat. The Soviets also stress troop morale and popular support for the country's war aims as factors in the balance of power. But they place greater emphasis than do the Chinese on the role of weapons in determining the war's outcome, especially nuclear weapons. Nevertheless, the Soviets say that the effectiveness of nuclear weapons in defeating the enemy may be due less to their destructive power than to their disorienting impact on enemy forces. This Soviet view contrasts sharply with the American focus on the material damage inflicted by nuclear weapons.

2.3.1 Chinese Views.

Chinese leaders, beginning with Mao Zedong and continuing to the present, have often publicly stated that China is not afraid of war and is confident of ultimately winning any military conflict. [29] Privately, Chinese officials and analysts acknowledge that such statements by the leadership serve an important deterrent function against a stronger adversary. In discussions with Chinese analysts in 1981 and 1983, they pointed to the Korean War, the 1969 Sino-Soviet border clashes and the "lesson" to Vietnam in 1979 as evidence of China's determination to fight if necessary to protect its security interests. They argued that this policy has the effect of intimidating a militarily superior enemy, and preventing the escalation of conflict. In all three incidents, the Chinese perceived the

balance of power as increasingly unfavorable to China and took the initiative by striking first with the aim of restoring the status quo ante, thereby changing the prevailing balance of power.

The Chinese also stress that the morale of a country's troops and the extent of popular support for its war aims can be decisive in wartime. Some Chinese analysts argue that a war effort waged by advanced industrialized countries such as the U.S. would not be supported by the middle classes who are "satisfied with lives" and fear instability. These analysts also say that Soviet troop morale and popular support would likely be high, thus providing them with wartime advantages over the United States. As for China, they say that in the event of war, the populace would immediately rally behind the government, possibly more quickly and actively than the Soviet population. "If the Chinese people think that the war is for themselves," a retired Chinese colonel said, "then we need not worry about morale."

The Chinese say that high morale and preparedness in the population and the troops can diminish, if not prevent, psychological disorientation in war. In China's military training, emphasis is placed on political and ideological indoctrination as well as on tactics. Since 1958, Chinese training programs have included preparation for fighting in chemical warfare conditions. [30] To prepare the population for the possibility of a nuclear attack, the Chinese have built a

large-scale civil defense network in most major cities, and to avoid panic and confusion, they have sought to teach the people the procedures to follow in the event of a nuclear war. One such example is a book published in 1979 entitled, Knowledge for Defense and Protection Against Nuclear Weapons. The author's objectives in writing the book, as noted in the preface, were to "popularize the knowledge of defending against nuclear weapons" and to help the readers "in understanding the capacities of nuclear weapons and in mastering the methods of defense and protection against" such weapons. "If we can master its principle of killing, wounding and destroying, become familiar with the knowledge of defending and protecting ourselves against it, we can fight it strategically and pay attention to it tactically," the author's argues. "We are not blindly afraid, neither are we numbly nearsighted." [31]

2.3.2 Soviet Views.

The Soviets also stress that the moral-political preparation of the troops and the population can be an important factor in wartime. In calculating the balance of power, the Soviets say that military planners must measure "the morale of the armies of the two sides, the attitudes of the troops to the policies of the warring states and their war aims." In a coalition war, "it is required that the morale of the troops and population of each warring state be taken into account and plans for strategic

operations be developed accordingly." [32]

Soviet writers argue that the morale factor, while important in a conventional conflict, could be decisive in a nuclear war. "Nuclear weapons," they argue, "will exercise an enormous influence on the masses of fighting troops." [33] "In a war in which nuclear-missile weapons are employed, in a certain sense changes will occur in the interdependence of the components, the two sides of the morale factor: the strength of the morale of the population must be very high in order to stand up to such tests and in order not to lose self-control, the will to fight and faith in victory over the enemy under conditions of mass fatalities and destruction. . . . It is obvious that victory in such a war will depend to an enormous degree on the ability of the population to maintain essential steadfastness and courage, not to succumb during moments of great trials to feelings of hopelessness and despair, and to preserve its strength and will to struggle with the enemy." [34]

Soviet writings assert that the psychological damage to the population in the wake of a nuclear attack may be critical in determining war outcome--thus providing advantages to the country that employs nuclear weapons first. M.V. Frunze's statement concerning the psychological effect of nuclear weapons is often cited by Soviet military analysts: "The extent of the psychological loss cannot be calculated and under certain conditions it can exceed by many times the material damage which is caused by these

weapons of destruction." The launching of nuclear strikes, the Soviets argue, "may cause panic and confusion in the ranks of the defenders. A portion of the personnel, even if it has not landed in the sphere of immediate destruction, may be stunned, disorganized, and lose its self-control." [35]

The psychological impact of a nuclear attack on the population, according to Soviet writings, would affect the ability of a country to band together and restore the productive capacity of the economy, including the reconstruction of destroyed installations and the production of weapons, ammunition and other requirements to support the continued war effort. For even the surviving population "cannot be certain that the threat to their lives is over. This threat may continue to exist in the form of radioactive contamination, and this state of uncertainty, the continuing fear for one's life, may have no less a psychological effect than the nuclear explosion itself." [36]

The perceived importance of psychological factors in the balance of power in both peacetime and wartime has prompted a large-scale Soviet effort to prepare the Soviet population and troops for the possibility of war. In Soviet educational institutions, children are indoctrinated with patriotism and confidence in the ability of the government to protect its citizens. A civil defense network has been constructed in the largest Soviet cities in preparation for a nuclear, chemical or biological attack. [37] The Soviets argue that these measures

could help lessen wartime panic and confusion. They say that the existence of a civil defense network and the knowledge of government contingency plans to protect the population in the event of war provides the Soviet Union with psychological advantages over the enemy that could be critical to the balance of power, especially in the post-nuclear phase of war.

The Soviets argue that as a result of their efforts, the morale of the Soviet population and the army is higher than that of the United States. "Our people, united and monolithic in the social-political sense, clearly perceiving the justness of the character of the struggle against imperialism have infinitely more 'reserve of firmness' of their moral forces than the populations of capitalist countries," argued one Soviet military writer. Soviet "higher moral spirit will assure the fuller utilization of the country's economic capabilities for the purpose of achieving victory, and will provide a firm foundation for high moral-political combat qualities of the fighting troops." [38]

The Soviets are apparently less sanguine, however, about their relative "reserve of firmness" vis-a-vis China. Soviet analysts acknowledge that China's psychological preparedness for war is very high. Privately, they argue that in the event of war, millions of Chinese would be ready and willing to fight and that the Chinese leadership would be prepared to risk several hundred million casualties to attain victory--and that this

factor must be considered in Soviet planning. Soviet writers note that Chinese leaders have adopted measures similar to those implemented by the Soviet leadership to prepare the Chinese population for war. [39] They also assert that current Chinese efforts to adapt people's war to modern conditions include preparations for fighting a nuclear war. As evidence of this, one analyst pointed to Hua Guofeng's speech at the 11th Party Congress of the CCP in 1977 in which he said, "Regardless of the fact that sooner or later, on small or large scales, the enemy will unleash war, be it a conventional or nuclear war, our army, relying firmly on people's war as a miraculous force, must always be ready to smash any enemy." The analyst pointed to China's strike against Vietnam in 1979 as proof of the successful indoctrination of Chinese forces in Maoism, military nationalism and anti-Sovietism. [40] China's avowed readiness to fight a nuclear war if necessary is taken seriously by Soviet analysts. Apparently the Soviets are not confident that they could achieve a quick victory over China, even if they employed nuclear weapons in a surprise attack.

Thus, in calculating the balance of power with China in peacetime and wartime, the Soviets must give due consideration to China's psychological preparedness for war. The psychological factor might be critical in a protracted Sino-Soviet conflict. And in the post-nuclear phase of war, relatively greater psychological preparedness might provide China with advantages

over the Soviet Union.

2.4 MILITARY FACTORS IN THE BALANCE OF POWER.

The Soviets and Chinese have similar views as to how a war might start and the range of qualitative factors affecting the outcome of conflict, but they have very different views as to how a war would evolve. The Soviets assign top priority to mobilizing massive force for a surprise attack, which, they say, is likely to be decisive. The Chinese, on the other hand, argue that while a surprise attack can give the attacker an initial advantage, the balance of power can shift in favor of a weaker defender as the war evolves. Soviet and Chinese military analysts express acute understanding of their adversaries' weaknesses, which their warfighting strategies seek to exploit. The Soviets, whose offensive military power is far superior to China's, plan to keep the conflict away from Soviet territory and avoid a protracted war. The Chinese, however, plan to use their own territory as the battleground and to embroil the Soviets in a long war in which China's strengths will prevail as the Soviets' advantages dissipate. The Soviets seek to avoid a two-front war, but do not rule out the possibility of having to fight on the eastern and western fronts simultaneously. The Chinese see the threat of two-front war as enhancing deterrence and limiting Soviet options if war begins.

2.4.1 Soviet Views.

Soviet military writings assert that the initial stage of war is likely to determine its outcome. "Victory in war," according to one Soviet military analyst, "will be formed not so much from the sum of particular successes, but as a result of the effective application of a state's maximum power at the very beginning of armed conflict." [41] The Soviets stress surprise attack as maximizing the use of their military, psychological and economic strengths and disorienting the enemy. "Surprise in combat," the Soviets say, "makes it possible to catch the enemy unaware, to spread panic in his ranks, to paralyze the will to resist and to sharply reduce the combat capability of troops, to disorganize command, and to create favorable conditions for achieving victory even over superior forces." [42] Surprise is achieved, according to the Soviet Explanatory Dictionary of Military Terms, "by leading the enemy into error concerning one's own intentions, by preserving in secret the plan of battle, by speed and decisiveness of action, by hidden artificial maneuvers, by the unexpected use of the nuclear weapon and other new combat means." [43]

Soviet planning and deployments are aimed at maximizing their war potential for surprise and quick victory. The Soviets say they cannot rely on secret large-scale mobilization of forces or a surprise attack because of modern means of intelligence and "strategic reconnaissance." [44] "The solution to this problem,"

according to Marshal Sokolovskiy, "would be to maintain in peace-time those armed forces which would be in a position to reach at least the nearest definite war objectives before successive echelons are mobilized and put into action." [45] The Soviets have sought to maintain the political, psychological, legal and organizational basis for rapid mobilization of the society for war. For example, local military commissariats maintain a roster of the location and status of almost every adult male within their region. They are also responsible for registering all guns, motorcycles, automobiles, skis, cameras and other personal belongings that could be requisitioned in an emergency. [46]

The Soviets stress that the conditions of modern warfare place a premium on maintaining adequate numbers of well-trained troops in peacetime. Unlike previous conflicts in which "failings in the preparedness of the Army and Navy still could be eliminated in the course of war," Marshal Grechko argued in 1971, the troops must be ready "from the very first hours of the war" to "immediately begin and wage the most decisive and active combat actions. . ." [47] This training must also include preparedness to fight under conditions of nuclear, chemical and biological warfare. [48]

Despite their superiority over China in firepower and mobility, the Soviets are not confident they could not successfully use military force against China to achieve

political goals. The Soviets recognize the dangers of both entrapment in a costly protracted war in China and the widening of the war to a two-front conflict involving NATO. The Soviets are also concerned about possible Sino-American military and strategic coordination in a local conventional conflict such as Afghanistan and in a Sino-Soviet or U.S.-Soviet war. A Soviet general in April 1982 expressing concern about Chinese wartime cooperation with the West, asserted that "a certain military-political mechanism for the coordination and working out of decisions on various international problems and crisis situations has now been formed between Beijing and Washington as well as several other NATO states." [49]

2.4.2 Chinese Views.

The Chinese acknowledge that the Soviets would likely be superior to Chinese forces in the initial stage of a Sino-Soviet conflict, and that the overall balance of power would likely favor the Soviet Union. But the Chinese argue that the relative balance between Soviet and Chinese forces is not constant, and that by relying on correct strategy and tactics, the weaker power can gradually shift the balance. Mao Zedong, whose military theories still provide the basis for Chinese strategy, argued that "the exponents of quick victory" are wrong. Advocates of this strategy, he wrote either "completely forget the contradiction between strength and weakness. . . or they

presumptuously take the balance of forces at one time and place for the whole situation." [50] In the course of the war, Mao stressed, "provided we employ correct military and political tactics, make no mistakes of principle and exert our best efforts, the enemy's disadvantages and China's advantages will both grow as the war is drawn out, with the inevitable result that there will be a continual change in the difference in comparative strength and hence in the relative position of the two sides. When a new stage is reached, a great change will take place in the balance of forces, resulting in the enemy's defeat and our victory." [51]

Mao outlined three stages of war which continue to be pointed to by Chinese leaders in major statements on China's defense policy. In the first stage--the "strategic defensive"--Chinese forces would be weakened. China's material inferiority at the outset of the conflict "will be aggravated by war losses, namely, decreases in territory, population, economic strength, military strength and cultural institutions." At the same time, however, positive changes will take place, Mao argued. These changes include "the experience gained in the war, the progress made by the armed forces, the political progress, the mobilization of the people, the development of culture in a new direction, the emergence of guerrilla warfare, the increase in international support, etc." Also in this first stage of war, the enemy will suffer changes for the worse, including "hundreds

of thousands of casualties, the drain on arms and ammunition, deterioration of troop morale, popular discontent at home, shrinkage of trade. . . condemnation by world opinion, etc." [52] The primary problem during this phase, asserted member of the Party's Military Affairs Commission Su Yu in 1977, quoting Mao, "is how to conserve our strength and await an opportunity to defeat the enemy." [53]

In the second stage of war, Mao asserted that the enemy's "military and financial resources will be seriously drained by China's guerrilla warfare, popular discontent will grow" in the enemy country, "the morale of her troops will deteriorate further, and she will become more isolated internationally." China, however, will make further progress in the political, military and cultural spheres and in the mobilization of the people; guerrilla warfare will develop further; there will be some new economic growth on the basis of the small industries and the widespread agriculture in the interior; international support will gradually increase. . ." [54] Mao concluded that the second stage might last a long time, but that during that time "there will be a great reversal in the balance of forces." [55]

Mao explained that in order to shift the balance of forces in their favor, the Chinese must be willing to temporarily give up territory as part of an effort to "lure the enemy" deep into the heart of the country. "We can accomplish a change in the balance of forces only when the enemy has penetrated deeply into

our base area and tasted all the bitterness it holds for him."

[56] Chinese Defense Minister Xu Xiangqian pointed out in 1978 that "by luring the enemy in deep we do not mean letting enemy troops go wherever they like but we will force them to move as we want them to; at key places we will put up a strong defense, prevent them from penetrating inland unchecked and systematically lead them to battlefields of our choice so as to wipe them out piecemeal." [57] Through a "process of growth, decline and change in the relative strength of the two sides," the balance of forces will shift in favor of Chinese forces. [58] When this happens, the war enters the third state in which Chinese strategy changes from "strategic defense" to "strategic offense." China's regular forces then seize the initiative strategically to launch a final counteroffensive to drive the enemy out of Chinese territory.

Chinese strategy seeks to capitalize on China's strengths and to exploit Soviet weaknesses. The Chinese say their wartime advantages include a vast territory which gives China's forces room to maneuver, a huge population which provides abundant reserves for fighting a protracted conflict; and the PLA's experience in using obsolete military equipment to defeat an enemy armed with more advanced weapons. [59] The Chinese are aware that Soviet strategy vis-a-vis China emphasizes a short conflict that would preclude entrapment in a protracted people's war. The Chinese say they are confident, however, that they can deny the Soviets a quick victory and embroil them in a long war

that will enhance Soviet weaknesses and shift the balance of power in China's favor. For example, the balance might be shifted by direct or indirect U.S. military assistance to China; the opening by NATO of a second front, creating a two-front war for the Soviets; or an attack on the Soviet Union by NATO in the aftermath of an exhausting protracted conflict with China. The Chinese also say that the Soviets cannot be certain that a surprise offensive would be successful. "The aggressor must occupy our territories," one Chinese military analyst argued. "The more territories he occupies, the longer will be the front, and the more widely scattered will be his forces. His weaknesses will also be more fully exposed and confront him with insurmountable difficulties." [60] Soviet forces "will be fighting on a foreign land, unfamiliar with the place and the people, experiencing difficulty in moving about." [61]

In a prolonged war, the Chinese say that the Soviets would face severe logistical problems in supporting forces in China since their lines of communication (LOCs) are both long and vulnerable. An article in the party journal Red Flag in 1981 asserted that China would seek to exploit Soviet logistical problems: "We can still actively carry out various kinds of guerrilla warfare, attack the enemy's rear bases, undermine its communications apparatus and communications and transportation, cut off its supply lines, tire out, wear down and pin down the enemy." [62] Chinese strategists privately say the PLA would not

only attack the LOCs within China but would launch counterattacks into Soviet territory to disrupt the Soviets' supply lines.

The Soviets' superiority in modern conventional weapons could render them vulnerable to attack by Chinese guerrilla forces, according to one Chinese military analyst. "In modern war," the analyst argued, "the damage rate of. . . weapons and equipment will be greatly increased, and when the enemy is replenishing his weapons and equipment at the front, he will certainly have to carry out the battlefield crash-repairs of his damaged vehicles, weapons, and equipment. In that case, the guerrilla forces can make surprise attacks on the enemy's maintenance detachments and thus weaken the restoration and regeneration of his combat strength." [63] Another Chinese writer asserted that "the lines of communication are the arteries of modern armies, and without good roads, they can hardly make any headway. Tanks, armored cars and other vehicles rely a great deal on fuel supply, and once the fuel supply line is cut, they will become heaps of scrap metal." [64]

The Chinese anticipate that the Soviets would seek to ensure a quick victory by employing nuclear weapons in a surprise attack. [65] The Chinese insist, however, that they are prepared to fight a nuclear war, if necessary, and that while Soviet use of nuclear weapons might provide initial advantages in launching a surprise attack, it would not fundamentally change the nature of the war or Chinese strategy. "Surprise attack," warned a

Chinese Political Textbook for the Militia, "is the favorite tactic employed by social imperialism. With the development of modern science and technology, the enemy has built not only a large number of air units and tanks but also short- and medium-range missiles and intercontinental missiles, thus creating more favorable conditions for launching a surprise attack." [66]

An authoritative article written in 1978 entitled, "We Must Be Able to Fight a Nuclear War in the First Stages of Any Future War," argued that the "current trend indicates that the Soviets might use tactical nuclear weapons (TNW) any time a war breaks out." Not only is it possible that nuclear weapons will be used in the initial stage of the war, but it is also possible that if the Soviets fail to achieve a quick victory with conventional weapons, they may "resort to tactical nuclear weapons to spring a shock attack." [67] In response to such an attack, the Chinese privately say they would be ready to counterattack with battlefield TNW. A PLA exercise in June 1982 simulating the use of TNW demonstrated this readiness, signaling the Soviet Union that use of TNW against China would not decisively shift the balance of power in the Soviets' favor. The exercise was described in the Chinese press as a counterattack operation in which Chinese "troops' nuclear strike took the enemy by surprise and dealt his artillery positions and reserve forces a crushing blow." [68] The article left ambiguous the question of whether or not the Chinese would initiate the use of TNW.

The TNW exercise, and other recent Chinese efforts to "adapt people's war to modern conditions," Chinese strategists say, are aimed at strengthening China's deterrence of the Soviet Union by increasing the costs of an attack and by reducing Soviet confidence that an attack would be successful. China's army newspaper Jiefangjun Bao, characterized these new trends in Chinese strategy as placing greater emphasis on "active defense."

[69] This shift has evolved in the past few years while Chinese leaders have sought to determine how best to enhance the capabilities of the PLA while trying to secure access to military technology and equipment from the West, especially from the United States. A policy of "active defense," however, does not suggest that in the event of a Soviet invasion the PLA will "meet the enemy at the gate"--deploy their main forces near the border to prevent the Soviets from entering Chinese territory. Rather they will seek to shorten the second stage of the war through use of more modern tactics and arms. This would reduce the costs of conflict to China in both lives lost and territory given up to the Soviets in the second stage of the war. A retired Chinese army colonel, interviewed in Beijing in June 1983, explained that with better weapons "we can narrow the gap with the enemy and thus have to trade less space for time."

Since 1980, Chinese military writings have noted scores of training exercises aimed at achieving the goals of a more active defense. One Jiefangjun Huabao article described an exercise in

which Chinese heliborne troops assaulted and occupied an "enemy" artillery position behind the front lines. [70] In another exercise, Chinese paratroopers were dropped behind enemy lines--possibly to cut off enemy supplies. [71] These and other exercises demonstrate Chinese efforts to enhance the mobility of their forces to better counter an invading Soviet force. But improved tactics and equipment will not, according to a Chinese military analyst, lead to "a fundamental change in strategy--only a tactical change. People's war strategy is flexible," and it will continue to provide the basis for China's deterrence and warfighting strategy.

2.5 THE PEACETIME/WARTIME SPECTRUM AND THE SINO-SOVIET BALANCE OF POWER.

Unlike most U.S. and Western assessments of the balance of power, the Soviets and Chinese both assign importance to non-military factors in calculating the balance between themselves and their potential adversaries at various points along the peacetime/wartime spectrum. They argue that while military factors are likely to provide advantages over an enemy--especially in the initial stages of conflict--a narrow analysis of the balance of power that stresses only military factors may not be accurate in predicting war outcome. The relative importance of various military and non-military factors, according to the Soviets and Chinese, changes as a conflict

evolves. Therefore the balance of power is not static, but shifts as the nature of the conflict changes along the peacetime/wartime spectrum. From this perspective, the Chinese and Soviets calculate a range of assessments of the Sino-Soviet balance by examining both military and non-military factors along the entire spectrum. For example, the balance of power in the final stage of war--post-nuclear recovery and continued fighting with conventional weapons--is important in Chinese and Soviet judgments of each other's strengths and weaknesses in peacetime and at lower levels of conflict.

The 1969 Sino-Soviet border clashes and the 1979 Chinese "incursion" into Vietnam demonstrate the relative importance of military and non-military factors in Soviet and Chinese perceptions and assessments of the balance of power at different points on the peacetime/wartime spectrum. The March 9, 1969 Chinese attack on Soviet troops on Zhenbao Island followed the deterioration of Sino-Soviet relations during the 1960s from "eased tension" to cold war and the buildup of Soviet forces along the Chinese border, which shifted the military balance increasingly against China. The Chinese also perceived that the peak of the Cultural Revolution had resulted in internal political disarray which had weakened China's position in the balance of power and increased its vulnerability to Soviet intervention. Chinese concern was heightened by the Soviet invasion of Czechoslovakia in August 1968, which set an ominous

precedent for Soviet use of force to replace a government in another socialist country. By early 1969, the Chinese perceived that Sino-Soviet relations had reached a crisis point and initiated the surprise attack on Zhenbao Island. The Chinese sought to demonstrate their willingness to fight despite their relative military weakness. Even if they suffered heavy casualties, the Chinese calculated that in the wake of the conflict they would return to the cold war point on the spectrum with a more favorable balance of power. By initiating the conflict, the Chinese created a wartime environment in which to mobilize their population against an external danger and strengthen China's political unity, thereby averting Soviet exploitation of China's political chaos and enhancing China's deterrence of a large-scale Soviet attack in the future.

The Soviets sought to intimidate China in their March 22 counterattack and subsequent strikes along the border. The Soviets responded to the Chinese attack with limited conventional warfare--the point on the spectrum at which they perceived the military factor to be most important and the balance of power to be most favorable. The Soviets apparently viewed the Chinese to have important political, economic and psychological advantages in a large-scale conventional war--such as an invasion to seize Beijing--that ultimately might be decisive. At the same time, the Soviets apparently perceived that their military advantages over China in nuclear weapons could be used to shift the balance

of power in their favor--by launching a nuclear strike against China or at least by threatening such an attack to intimidate the Chinese leadership. Soviet feelers to the U.S. to condone a nuclear strike were rejected, significantly increasing the costs of such an option. [72] The Soviets also ensured that the threats were conveyed to Chinese leaders to warn them of the dangerous consequences of continued hostile actions against the Soviet Union, which may have influenced China's decision to open border talks with the Soviet Union in the fall of 1969.

Chinese leaders again perceived a crisis situation evolving in late 1978 following the signing of a Soviet-Vietnamese Treaty of Friendship and Cooperation in November and Vietnam's invasion of Kampuchea the following month. These two events were perceived in Beijing as upsetting both the regional and the global balance of power. Closer relations between Hanoi and Moscow consolidated Soviet strategic encirclement of China. By occupying Kampuchea, Vietnam eliminated a government closely allied with China and raised the specter of a powerful, Soviet-backed Vietnam dominating Indochina and competing with China for regional influence.

China's "punitive attack" in February 1979 was intended to shift the peacetime balance of power by launching a local war with announced limited military aims. The Chinese attack raised the economic costs to both Moscow and Hanoi by destroying a large portion of Vietnamese territory south of the Sino-Vietnamese

border and by forcing Vietnam to increase its armed strength to a million troops divided between two fronts--Kampuchea and the border with China. The Chinese sought to show Vietnam and the Soviet Union that they would not stand idly by and allow Vietnam to upset the regional balance of power with impunity. They also sought to demonstrate that Vietnam's defense ties with Moscow would not deter China from acting to protect its interests. The Chinese calculated that by declaring that they would not attack Hanoi the Soviets were not likely to respond to the attack on their ally by taking military action against China. Beijing estimated that Soviet interests in Vietnam were not sufficient to warrant risking a major war with China or damage to their relations with the United States and Western Europe. By demonstrating the limits of Soviet support for Vietnam, the Chinese enhanced their position the peacetime balance of power after withdrawing from Vietnam.

The Soviets calculated that inaction in response to China's attack on their ally would be less costly than military action against China. Thus, the Soviets limited themselves to supporting Hanoi by sending naval ships to the South China sea and airlifting supplies to Vietnam. The Soviets were concerned that the United States might come to China's aid if Moscow used military force--a concern that was heightened following the normalization of relations announced in December and Vice Premier Deng Xiaoping's visit to the United States on the eve of the

invasion. The Soviets perceived China and the United States moving toward a military alliance and did not want to push them closer together. Even if the U.S. did not become directly involved in a Sino-Soviet conflict, the Soviet Union risked a serious worsening of relations with Washington as the SALT II agreement was nearing completion. In addition, the Soviets calculated that military action against China could also have undermined detente with Western Europe and prompted a faster paced military buildup by Japan and NATO. Thus, while the Soviets' position in the balance of power with China may have been somewhat weakened, Moscow's decision not to act avoided serious setbacks in its global strategic position.

Scenarios of possible future conflict between the Soviet Union and China also demonstrate the relative importance of military and non-military factors in Soviet and Chinese perceptions and assessments of the balance of power at different points on the peacetime/wartime spectrum.

2.5.1 "Manchurian Style" Invasion.

The Soviets might consider a high-risk invasion of China under extreme circumstances such as deteriorating relations with China and impending war with the West. An invasion might be supported by the Soviet leadership if it believed that a "pro Soviet faction" existed in China on whose behalf the Soviet Union could successfully intervene to change China's strategic

orientation.

The Soviets would likely launch a surprise attack, but they would have less confidence that it would be militarily and psychologically decisive against China than against NATO. Consequently, even if they planned on a short, decisive war, the Soviets would risk entrapment in a protracted war. They would perceive the Chinese as psychologically prepared to fight a long war under adverse conditions. The Soviets would also see the Chinese as having the political advantage of fighting what would be perceived as a "just" war to defend their own territory. The Soviets also would expect the Chinese to be able to sustain economic production for military and civilian needs during the conflict while the Soviets' extended supply lines would be vulnerable to Chinese interdiction and thus be a geographical disadvantage. In addition, Moscow would risk bringing about what it was trying to avoid--a two-front war with NATO in the west and China in the east. Even if a second front were not opened, the Soviets could eventually face the U.S. in a vulnerable, war-weakened position. Finally, the Soviets would risk very heavy losses and difficult fighting conditions if China used TNW on the battlefield to blunt the Soviet invasion. A large-scale Soviet invasion of China--with or without the use of battlefield TNW--would be the most demanding Soviet action against China. Although China would suffer tremendous losses, the conventional war point on the peacetime/wartime spectrum is one of two points

were China's strengths and the Soviet Union's weaknesses are maximized.

2.5.2 Nuclear Attack in Global War.

The Soviets perceive that the "Chinese threat" would be greatest to the Soviet Union in the context of a U.S.-Soviet global nuclear war. The Soviets fear that China would emerge relatively unscathed from such a conflict might prompt them to launch massive nuclear attacks on China to prevent the Chinese from exploiting the Soviets' vulnerabilities in a post-nuclear struggle for control of Eurasia. The Soviet attacks would be aimed at destroying China's military forces and ensuring a slower recovery of China relative to the Soviet Union. The Soviets perceive China as having economic, political and military advantages in survivability which would provide for a faster recovery than the Soviet Union. Even though heavy industry and war production assets are geographically concentrated in China and would likely be destroyed, the Soviets nevertheless argue that the largely rural and self-sufficient Chinese economy might suffer less damage than the Soviet economy; China's political control structure would likely be able to organize China's economic assets to restore production; and China's huge military and militia forces would probably survive in greater numbers than Soviet forces and the technological level of functioning armaments would likely be relatively equalized. In addition, the

Soviets fear that the size and dispersal of China's population in peacetime would ensure that a far larger number of Chinese would survive in the post-nuclear phase of war. Although it may be highly unlikely that the Soviets will be confronted with this "worst case," the Soviets' perception of the balance of power at the post-nuclear point on the peacetime/wartime spectrum influences their considerations of risks and calculations of the balance at lower levels of conflict.

2.5.3 Selective Use of Force.

The Soviets have options for use of military force against China that are neither a desperate act in a global nuclear war or a high-risk invasion to change the government in Beijing. Some of these options include limited conventional strikes along the border, surgical air strikes against Chinese industries and other targets in the northeast, and a deep incursion into remote areas of northwestern China in support of a breakaway minority group. Moscow would likely calculate that superior Soviet military capabilities were more important than non-military factors in determining the Sino-Soviet balance of power at these points on the peacetime/wartime spectrum. In these options, since the military balance would be both primary and favorable to Moscow--and many of the non-military factors in which China had advantages at other points on the spectrum would be relatively less important--the Soviets would perceive themselves to have the

advantage in the overall Sino-Soviet balance of power.

Nevertheless, even limited Soviet military action against China would still risk highly adverse international reaction, including possible U.S. military assistance to China. And any Soviet use of force against China would not necessarily achieve Moscow's political objectives and could lead to even greater Chinese hostility and intransigence to Soviet demands.

SECTION III

IMPLICATIONS FOR THE UNITED STATES

This section focuses on some of the implications for the United States of Soviet and Chinese balance of power perceptions in peacetime and wartime. The most significant strategic developments in Asia affecting Soviet and Chinese perceptions are analyzed, and their likely impact on Soviet and Chinese policies and behavior are examined. The effect of changes in Moscow's and Beijing's perceptions of the strategic environment on U.S. interests in Asia is also assessed.

The Soviets and Chinese assess the strategic environment from a balance of power perspectives that stress economic, political, psychological, geographic and other non-military factors. (See Section II) Based on their perspectives, this volume examines the role of China and U.S.-Chinese military ties in deterrence of the Soviet Union. This volume also explores the implications for the U.S. political and military position in Asia of likely Soviet and Chinese perceptions of the strategic environment in four possible outcomes of the U.S.-Soviet INF negotiations. Finally, U.S. contingency planning for Sino-Soviet conflict and the Soviet Far East military buildup are briefly examined.

3.1 CHINA AND DETERRENCE OF THE SOVIET UNION.

Likelihood of Soviet use of force against China: The United States has important strategic and diplomatic interests at stake in developments in Sino-Soviet relations. A far-reaching rapprochement between Beijing and Moscow or Soviet domination of China by the use of force could drastically alter the global balance of power. And a Sino-Soviet war could escalate into a wider conflict involving the United States and its allies. Since 1969, American leaders have viewed both deterrence of Soviet military action against China and prevention of Sino-Soviet rapprochement as vital to the security of the United States. In addition, Washington has perceived closer Sino-American relations as providing useful diplomatic leverage over Moscow as well as strengthening the U.S. global military position vis-a-vis the Soviet Union.

The Soviets are deterred from using massive military force against China by political, economic, geographic, demographic and other non-military as well as military factors (see Section II). Moscow is especially deterred from launching a large-scale, deep penetration invasion of China in which China's non-military strengths would be maximized. At lower levels of conflict, however, the Soviets' options for using or threatening to use force against China are more viable militarily. But in weighing various military options against China, the Soviets would not only consider military factors in calculating the Sino-Soviet

balance of power. Moscow would also be concerned about the political and military implications of U.S. reaction to the threat or use of force against the Chinese. Washington could take a wide range of unilateral and multilateral political steps that damaged the Soviets' global position--steps that would likely be far stronger than those taken in response to the Soviet invasion of Afghanistan in 1979. Moscow would also anticipate possible U.S. military assistance to China that could significantly increase China's defensive capabilities and strengthen Beijing's resolve to resist Soviet coercion, thus decreasing the likelihood of Soviet military success. Finally, the Soviets would calculate that use of force against China would risk direct military confrontation with the United States.

3.1.1 The "China threat" TO The Soviet Union In Global Nuclear War.

Soviet assessments of the wartime balance of power with China are not limited to scenarios in which Moscow's superior military capability would be used to initiate conflict. The Soviets also view China as a potential threat in a U.S.-Soviet global war in which China could attack a war-weakened Soviet Union. And in a post-nuclear struggle for control of Eurasia, the Soviets perceive China as having substantial advantages in its large population and decentralized economy.

Moscow attaches far more importance to this strategic threat

posed by China than is usually understood in the West. Some Western analysts have argued in the last few years, for example, that China's strategic value to the United States had been overstated in the past and that the notion of the "strategic triangle" was no longer valid. They have pointed to Chinese weaknesses, citing the following factors: 1) China is a very poor country with a huge population; 2) the gap in military capabilities between China and the Soviet Union has been growing wider, not narrower; and 3) despite this worsening balance of forces, Chinese leaders have accorded a low priority to defense modernization.

Because of these weaknesses vis-a-vis the Soviet Union, some analysts have argued, China should be considered a Third World country of regional, not global, importance, similar to India or Brazil. In addition, Western analysts have questioned China's reliability as a "strategic partner" of the U.S. They point to China's recent assertion of an "independent" foreign policy, including its condemnations of American global policies and its improved ties with Moscow as further evidence that China's strategic usefulness to the United States is determined by--and limited to--its geographical location and its hostility to the Soviet Union. China's sole contribution to deterrence of the Soviet Union, they argue, is that China ties down some 50 Soviet divisions along the Sino-Soviet border. Some analysts also suggest that because of the backwardness of China's military, the

Chinese would reap significant benefits from defense ties with the United States, while Washington would gain little, if anything. Still other analysts doubt China's interest in developing military ties with the United States and question whether Beijing and Washington have parallel strategic interests.

Some of these assessments seem valid from a peacetime perspective: China is a poor country with resources too limited at this time to afford a major defense buildup; the military gap between the Soviet Union and China has been growing as the Soviets have engaged in a major Far East buildup and have deployed their most sophisticated military equipment to the region; and China is unwilling to become an overt ally of the United States or to abandon its criticisms of U.S. policies.

These peacetime assessments, however, do not fully appreciate China's role in the global balance of forces and the strategic value of Sino-American military cooperation. The peacetime/wartime framework to examining the balance of power discussed in Volume I provides a new conceptual approach to assessing China's strategic importance: the peacetime weaknesses of China are in many ways compensated for by China's strengths at other points along the peacetime/wartime spectrum. Our analysis of Soviet and Chinese perceptions of the balance of power in Section II has shown that both countries focus as much if not more on wartime and postwar factors of the military balance as on the peacetime balance of conventional and nuclear forces. Both

the Soviets and the Chinese base their military planning for all levels of conflict on warfighting doctrines that envision protracted struggle even beyond massive nuclear exchanges as the surviving forces and population seek to maintain and extend their control in the battle for Eurasia.

This perspective allows for a greater appreciation of the Soviets' perception of the strategic threat posed by China--and China's strategic value to the United States and the West. While Soviet leaders may not be confident that the Soviet Union could survive a U.S.-Soviet nuclear war as a functioning society, Soviet military planning starts from the assumption that nuclear war is theoretically survivable and "winnable" and that the final outcome of the conflict will be decided by ground troops in a post-nuclear struggle for territorial control.

The Soviets' assessment of the force requirements to meet the "worst case" China threat are probably far greater than current Soviet deployments. During and after a U.S.-Soviet nuclear war, the Soviets would be concerned with deterring or defeating a Chinese effort to exploit the vulnerabilities of a crippled Soviet state. This would require Moscow to reserve thousands of warheads on strategic and theater nuclear systems not only to eliminate China's nuclear weapons, but also to destroy its conventional forces, command and control facilities, economic recovery assets, and political and social control structure. Thus, the Soviets' "China withhold force" would have

to be composed of expensive, survivable systems that would be available for use after the U.S.-Soviet phase of the war. From this perspective, they may view their current arsenal of mobile SS-20s for potential use against China as far from adequate to manage their "worst case."

This analysis suggests that the "China threat" may play a more significant role in U.S. deterrence of nuclear war with the Soviet Union than is generally recognized. Traditionally, U.S. assessments of the global balance and the strength of deterrence have focused on the outbreak of war and its escalation and on the relative quantitative and qualitative military capabilities of the two sides at the initiation of combat. Global war has been viewed almost exclusively as a U.S.-Soviet contest, and deterrence has been measured relative to the peacetime U.S.-Soviet or NATO-Warsaw Pact military balance. But from a wartime perspective that examines Soviet perceptions of how a war ends as well as how it begins and evolves, deterrence and warfighting become more complex and the significance of China--and possibly of other third powers on the Soviet periphery--increases. Thus, for example, even if the Soviets believed they could survive a nuclear war with the United States--and thus calculated that risking nuclear conflict would be a viable option in extreme circumstances--they might still believe that they faced "assured defeat" in a protracted struggle with China in the aftermath of the U.S.-Soviet nuclear war.

3.1.2 U.S.-Chinese Military Cooperation.

U.S.-Chinese strategic and military cooperation would benefit Washington as well as Beijing by enhancing deterrence of Soviet involvement in both higher and lower levels of conflict. The aim of this cooperation would be to affect Soviet perceptions of the balance of power by maximizing Moscow's concern about the wartime threat posed by China and Sino-American coordinated military actions. This threat includes: two-front war and potential Chinese exploitation of Soviet weakness during or after a U.S.-Soviet war; possible U.S. military assistance to China in a Sino-Soviet war or even direct involvement of the U.S. in such a war; and U.S. exploitation of Soviet weaknesses as a result of a Soviet conflict with China. Sino-American military and strategic cooperation could also affect Soviet perspectives on lesser contingencies involving other states. Deterrence of Soviet actions against third countries, such as an invasion of Iran, could be strengthened by the prospect of a coordinated Sino-American response that increased the danger to Moscow of both horizontal (widening) and vertical escalation of conflict. To obtain such benefits from military and strategic cooperation with China does not require the transfer of large amounts of weaponry to greatly strengthen China's unilateral military power. China's relative military backwardness does not preclude Sino-American planning for effective joint and complementary

military actions at various levels of conflict from local war to global war.

Even some proponents of closer U.S.-Chinese military ties have questioned the extent of shared security interests between Beijing and Washington, and China's desire to develop a military relationship with the United States. Beijing's recent emphasis on pursuing an "independent" foreign policy that includes improving ties with the Soviet Union and criticizing U.S. behavior as "hegemonist," they argue, indicates that Chinese leaders have rejected strategic ties with the United States. But China's strategic alignment with the United States is determined by long-term geopolitical realities: Chinese leaders will continue to seek a counterweight to Moscow's superior military forces arrayed against China by developing defense ties with the more distant and less threatening United States as well as with Japan and Western Europe. The scope of these ties and the pace at which China will seek to develop them will likely depend on Soviet behavior and political relations between Beijing and Washington. Even in a period of tension in Sino-American relations and eased Sino-Soviet tensions--including a thinning-out of Soviet troops on the Sino-Soviet border or confidence building measures between Beijing and Moscow--Chinese leaders are unlikely to be convinced that the Soviet Union no longer poses a threat requiring a counterbalancing strategy.

3.2 U.S.-SOVIET INF NEGOTIATIONS AND THE FAR EAST.

Since the spring of 1982, China and Japan have expressed increasing concern that an agreement on limiting U.S. and Soviet INF deployments might be limited to the European theater and allow an unrestricted buildup of INF in the Far East, including transfer of Soviet SS-20s from the western part of the Soviet Union to the Soviet Far East. The Chinese and Japanese strongly supported President Reagan's initial "zero option," in which the U.S. would forgo NATO deployment of Pershing IIs and GLCMs if the Soviet Union dismantled its already deployed INF, including SS-20s in the Far East.

In August 1983, the Soviets sought to partly alleviate Chinese and Japanese concerns--and thus divide the U.S. from China and Japan--by asserting that Moscow would "liquidate" SS-20s in excess of the ceiling agreed for Europe, rather than transfer them to the east. A month later, the United States offered not to deploy all its INF planned for Europe if an agreement could be reached on global limits. In this case, the U.S. would "reserve the right" to deploy the remainder outside Europe. Both China and Japan indicated concern that Washington's modified negotiating position implied U.S. willingness to sacrifice Asian interests in a Geneva accord. Despite U.S. reassurances, the Chinese and Japanese continued to indicate concern that the U.S. and the Soviet Union might reach an INF agreement that would damage their security. China and Japan have

begun to consult on the INF issue and have coordinated on a position calling for removal of all Soviet SS-20s.

The outcome of the INF talks will affect Soviet and Chinese perceptions and assessments of the balance of power. Perceived changes in the regional or global balances resulting from an INF agreement will likely influence their decisions on military strategies and deployments as well as on their foreign policies and political alignments. Four possible outcomes are considered below, and their implications for the U.S. are discussed.

3.2.1 No INF Agreement--Continued SS-20 Buildup.

Possibly the most likely near-term outcome is that the U.S. and the Soviet Union fail to negotiate an INF agreement and Moscow continues deploying SS-20s in the Far East. This outcome might enable Washington to gain politically from Soviet intransigence in the short run, but it would pose serious difficulties for the United States in the long run.

The Soviets would likely view their unrestricted ability to increase deployments of SS-20s in both the west and the east as improving their military as well as their political position in the peacetime balance of power. They would see a continued buildup of SS-20s in the Far East as providing Moscow with greater coercive political leverage over China and Japan. The Soviets would perceive their INF monopoly in the Far East as underscoring the divergence of security interests between

Washington on the one hand, and Beijing and Tokyo on the other. The Soviets might expect that a reassessment of U.S.-Chinese ties in Beijing would lead to reduced reliance on the U.S. as a counterweight to Soviet power and to further improvement in China's relations with Moscow. Nevertheless, the Soviets would not rule out the possibility that their continued SS-20 buildup could be politically counterproductive, and that the growing military gap might push China into a closer strategic relationship with the United States.

In the wartime balance of power, the Soviets would perceive the addition of large numbers of SS-20s as providing them with military and political advantages. Greater numbers of available SS-20 warheads would give Moscow more confidence in its ability to deter China from opening a second front against the Soviet Union in a U.S.-Soviet conflict, whether conventional or nuclear. In the Soviets' "worst case"--a post-nuclear phase of war in which the Soviet Union has been devastated by the United States and is vulnerable to exploitation by China--they would likely see larger numbers of SS-20s as enhancing their ability to intimidate China or destroy Chinese offensive capabilities and recovery assets. In either case, the deterrent value to the United States of Soviet concern about the "Chinese threat" (discussed in detail in Section II) would be diminished.

The Chinese would likely view the unrestricted buildup of SS-20s as further tilting the regional balance of power in the

Soviets' favor and enhancing Moscow's global position. Beijing would respond cautiously in the short run, continuing to take small steps to improve relations with Moscow while strengthening strategic ties with the United States. At the same time, the Chinese might step up their nuclear force modernization program, especially the deployment of more survivable land- and sea-based missile systems. In the unlikely event of a massive SS-20 buildup, the Chinese might break off their political dialogue with the Soviet Union and seek to rapidly expand military cooperation with the United States.

The Chinese would likely perceive a low-profile U.S. response to the Soviet buildup in the Far East--deployment of sea-based INF, for example--as strengthening the U.S. military position in the balance of power. They would also view the U.S. political position as improved if Washington strengthened its ties with other states in the region whose security is threatened by the buildup of Soviet power. But the Chinese would view the political costs of U.S. deployment of land-based INF in Asia--in South Korea, for example--as greater than the military benefits. They would see the deployments as weakening the overall U.S. position in the peacetime balance of power by creating tensions in Washington's relations with its allies and friends in the region, including China. The adverse political reaction to such U.S. deployments would be perceived by Beijing as more important than possible military gains because it might lead to greater

strains in the U.S.-led coalition and weaken deterrence of the Soviet Union. While Chinese leaders would not view U.S. INF in the region as posing a military threat to China, they would likely see the U.S. action as prompting an even greater Soviet buildup, thus further damaging Chinese security. The Chinese would also be concerned that deployment of U.S. INF in South Korea would exacerbate tensions on the Korean peninsula.

The negative impact of U.S. INF deployment in the Far East on U.S. relations with Asian states, particularly China and Japan, could have serious consequences for the U.S. In contrast with Europe where the political symbolism of a land-based counter to Soviet INF is important to maintain the credibility of the U.S. deterrent and the unity of the NATO alliance, deployment of land-based INF in Asia could undermine the U.S. position in the balance of power.

3.2.2 No Agreement--Unilateral Freeze On SS-20s.

Another possible outcome of the INF negotiations is that in the absence of a U.S.-Soviet agreement, the Soviet Union announces that it will freeze its SS-20 deployments in the Far East as a gesture to China and Japan. This outcome would likely have negative consequences for the U.S. position in both the regional and global balance of power. An atmosphere of growing tension and accelerating military competition between the U.S. and the Soviet Union would create a strong incentive for Moscow

to take steps to neutralize China and ease the threat of two-front war. The Soviets also might decide to halt SS-20 deployments in the Far East in response to a perceived need to reallocate their defense resources into programs focused primarily on meeting the American challenge. The Soviets could hope that by ceasing SS-20 deployments they could successfully pressure Chinese leaders to further improve Sino-Soviet political ties and to limit the extent of Chinese strategic cooperation with the United States.

A freeze on SS-20 deployments would be a trade-off for the Soviet Union in the global balance of power. If successful, the Soviets would gain in the peacetime balance by weakening the U.S. political position in Asia and improving their own, while also enhancing their military capability vis-a-vis the United States. By dividing the U.S. and China in peacetime, the Soviets might weaken the U.S. position at lower levels of conflict on the peacetime/wartime spectrum. But at higher levels of conflict on the peacetime/wartime spectrum involving the Chinese--especially post-nuclear conflict--Soviet confidence in deterring or defeating China would be less than if the SS-20 buildup continued.

By announcing an SS-20 freeze in the Far East, the Soviets would indicate a willingness to unilaterally stop increasing the threat to China as well as to other Asian states, including Japan. At the same time, Moscow would cast doubts on the value

of Chinese and Japanese reliance on the United States to negotiate a more favorable balance of power in Asia. In these circumstances, U.S. influence in the region might decrease: Tokyo could be less inclined to assume a greater military role in coordination with the U.S. and Beijing could distance itself from Washington, at least in a peacetime context.

The Chinese would likely respond cautiously but positively to a Soviet freeze on SS-20 deployments to at least prevent further deterioration of the Sino-Soviet military balance. The Chinese might calculate that the Soviets are in a period in which they are laden with foreign and domestic difficulties and thus in the next few years are not likely to launch a new aggressive drive to expand Moscow's global influence. This would provide China with a breathing space. In this relatively peaceful international environment, the Chinese would likely welcome a lessening of military tension with the Soviet Union. While the Soviets focused on managing competition with the United States, China would have an opportunity to concentrate its efforts on domestic economic development, which would lay the foundation for a later military buildup. In this situation, Chinese leaders might tacitly agree with Moscow's demand that China distance itself from the U.S. to ensure that the Soviet Union would not resume its SS-20 buildup. They could perceive that deterrence would not be weakened by postponing their plans to expand strategic ties with the United States. This might be viewed as

particularly desirable in a period in which the U.S. is perceived by China as pursuing hegemonistic and confrontational policies.

The Chinese would not view changes in the peacetime strategic environment due to a unilateral Soviet limit on SS-20s as necessarily shifting the wartime balance of power, however. Their strategy would likely remain unchanged, and they would not rule out the development of extensive strategic ties with the United States in response to aggressive Soviet behavior.

3.2.3 INF Agreement With Global Limits On Soviet SS-20s.

A third possible outcome is that the United States and the Soviet Union negotiate an INF agreement that places global limits on Soviet and American INF deployments that leads to reductions of SS-20s in Asia as well as in Europe. This is perhaps the most likely long run outcome of the Geneva talks, and the scenario in which the balance of power will be most favorable for the United States.

The Soviets would have little to gain in Asia from this outcome. They would be dismantling weapons systems in the Far East in exchange for limits on possible but so far unplanned U.S. INF deployments in the region. On the other hand, the agreement would place no limits on Chinese nuclear forces. This might lead the Soviets to demand a limited duration agreement that would allow for renegotiation to address any significant changes in the Sino-Soviet nuclear balance resulting from modernization of

Chinese forces.

By reducing their SS-20 deployments in the Far East, the Soviets would have even less confidence in their ability to deter China from entering a U.S.-Soviet conflict or to defeat China in a post-nuclear strategic environment. The Soviets would also view their leverage decreased in the Sino-Soviet talks and would see themselves in a generally weaker position from which to use coercive diplomacy against China. The Soviets would likely fear that such an agreement might strengthen U.S. ties with China and increase the likelihood of Sino-American wartime cooperation at various levels on the peacetime/wartime spectrum--from joint military efforts against Soviet forces in third countries to a coordinated two-front war effort against the Soviet Union with NATO in the west and China in the east.

The Chinese would likely view such an outcome as a gain for the U.S. and China in the balance of power. They would perceive the U.S. as having kept its commitment to protect the security interests of its Asian friends and allies. The Chinese would thus see the U.S. as a more reliable and useful ally. Beijing would also perceive this outcome as enhancing deterrence of the Soviet Union by increasing Soviet concern that the United States might come to China's assistance in wartime.

The dismantling of some Soviet SS-20s in the Far East would improve China's position in the peacetime and wartime Sino-Soviet balance and allow Beijing to maintain its concentration in

economic rather than defense modernization. An easing of U.S.-Soviet military competition in the Far East would also benefit China. By averting the deployment of U.S. land-based INF in Asia as a counter to the Soviet SS-20 buildup, the Chinese would not have to face an escalation of the U.S.-Soviet arms race in Asia which would further weaken China's position relative to the superpowers.

An outcome of the INF negotiations that led to reductions of SS-20s in the Far East would enhance Washington's influence in the region and strengthen the U.S. position in both the peacetime and wartime military balance. U.S. political and security ties with China and Japan would provide the basis for greater wartime cooperation among the three states. This would heighten Soviet concern that any conflict could escalate into a two-front war, thus strengthening U.S. deterrence of the Soviet Union.

3.2.4 INF Agreement Limited To Europe--Allows Transfer Of SS-20s.

A fourth possible outcome of the U.S.-Soviet INF negotiations is an agreement that only limits INF deployments in the European theater, thus implicitly allowing the Soviets to transfer to the Far East SS-20s that have been dismantled in the west. The Reagan administration's strong commitment to placing global limits on INF in the Geneva talks indicates that this is the least likely outcome. Nevertheless, pressures on both sides

could lead to a compromise agreement in which the issue of limiting Asian INF deployments is dropped or deferred to later negotiations. This outcome would likely damage U.S. relations with China, Japan and other Asian states and would weaken the U.S. position in the regional balance of power.

For Moscow, this would be the most advantageous outcome. By placing limits on the threat to the Soviet Union from U.S. INF in Western Europe, tensions would be eased with the West. This would lessen the demands on Soviet military resources and enable Moscow to focus greater attention on the Far East. The Soviet leadership would have the options (outlined above in "No INF agreement--continued SS-20 buildup") of either continuing their SS-20 buildup--to intimidate China and Japan in peacetime and to improve their balance of power position in wartime--or of unilaterally freezing their INF deployments as a political gesture to Beijing and Tokyo.

Although the Soviets would still have to be concerned about future U.S. INF deployments in Asia, they may not have wanted to limit or reduce their own forces in exchange for limits on possible U.S. land-based INF. In this outcome, the damage to U.S. relations with China and Japan would make U.S. INF deployment more difficult politically than if there had been no agreement. The Soviets would likely expect strains in U.S. peacetime relations with China and Japan and curtailment of U.S. security and military cooperation with both Beijing and Tokyo.

By securing U.S. agreement to an accord that did not include limits on Asian INF, Moscow would have cast doubts on the ability of the United States to enhance the security of its Asian friends and allies. This improvement in the Soviets' position in the peacetime balance of power would likely be perceived by Moscow as strengthening its position in the wartime balance by decreasing the likelihood and effectiveness of coordinated Sino-American and U.S.-Japanese military actions.

The Chinese would see this outcome as legitimizing unlimited Soviet INF deployments in the Far East--at least in the short run--thus allowing Moscow to continue increasing the threat to China and Japan. Chinese leaders would likely conclude that Washington's willingness to sacrifice China's security interests in peacetime diminished the likelihood that the U.S. would be a reliable strategic partner in wartime. Beijing would probably perceive the Soviets' position in the Sino-Soviet balance to be strengthened in peacetime as well as at lower and higher levels of conflict. (See discussion above in "No INF agreement--continued SS-20 buildup.") This might lead Chinese leaders to de-emphasize the role of the United States in their strategy. China would likely step up its military modernization program, based on the assessment that in a future conflict with the Soviet Union, they might not receive any assistance from the United States.

In response to domestic and international pressures,

Washington might back away from its commitment to place global limits on INF and reach a compromise agreement that only limited Soviet SS-20s deployed against Europe. The Reagan administration might perceive, for example, that by reaching an agreement in Geneva it could ease tensions with the Soviet Union, strengthen the NATO alliance and gain domestic support prior to the 1984 presidential elections. The U.S. might see diminished influence in the Far East as an acceptable price to pay for gains in the global balance. However, if Washington wanted to counter Soviet SS-20s in the Far East after reaching an agreement that did not place limits on INF in the region--by deploying U.S. land-based INF in South Korea, for example--it would face serious political difficulties. Any steps to improve the U.S. military position in the Far East by means of INF deployment might further exacerbate tensions in Washington's peacetime relations with China and Japan and undermine its wartime coalition in Asia.

3.3 OTHER IMPLICATIONS.

3.3.1 U.S. Contingency Planning For Sino-Soviet Conflict.

U.S. military contingency planning for Sino-Soviet conflict should focus on the more likely limited conflict scenarios rather than on an all-out Soviet invasion of China. The Chinese consider it highly unlikely that the Soviet Union would launch a large-scale, "Manchurian campaign" style invasion of China,

which, although very costly to China, would play into China's military and non-military strengths in the wartime balance of power. The Soviets likewise see such an attack on China as very high-risk, politically as well as militarily. Both the Soviets and the Chinese consider the limited use of military force by Moscow against China as more viable and more likely in a crisis situation. (see Section II)

The U.S. should consider a wide range of unilateral measures and bilateral steps with China in peacetime and wartime that could enhance deterrence and improve China's warfighting ability to resist Soviet military pressure. It would be in U.S. interest, for example, to assist China in modernizing and expanding its C3 and reconnaissance capabilities and its ability for realtime sharing of intelligence with the United States.

3.3.2 Soviet Far East Military Buildup.

The Soviets' perceptions of the potential threat posed by China, especially in their "worst case" of a post-nuclear conflict, create virtually open-ended force requirements. Soviet forces deployed against China are not designed for "swinging" to other theaters of military operations in a crisis or in wartime. It also is not likely that the Soviets would redeploy these forces in peacetime even if there are further improvements in Sino-Soviet relations, including a small reduction of troops in the border areas. In addition, the Soviets perceive a growing

U.S. and Japanese threat in the Far East and they are likely to continue building up their air and naval forces in the region to meet this "challenge." A continued Soviet buildup against the U.S. and Japan, however, will further reinforce China's perception of a growing Soviet military threat and of the need for closer military cooperation with the United States.

SECTION IV

LIST OF REFERENCES

1. For a description of net assessment methodology and discussion of its limitations, see Anthony H. Cordesman's preface in Anthony H. Cordesman and John M. Collins, Imbalance of Power: Shifting U.S.-Soviet Military Strengths, San Rafael, California: Presidio Press, 1978, pp. xvii-xx. See also Richard Betts, Surprise Attack, Washington: Brookings Institution, 1982, pp. 12-14. Betts, who develops the idea that a surprise attack would invalidate the existing balance of forces at the moment the war begins, is critical of military balance assessments that do not account for the impact of surprise. He notes that the balance "can only be subjectively appreciated in peacetime, except in terms of crude and minimally informative 'bean counts' of men and equipment or abstract simulations of force interactions." Betts also says that "most debate that flows from military assessments concerns 'how much is enough' in terms of the peacetime military 'balance.' But chipping away at an unfavorable imbalance of forces does not guarantee a greater chance of success in war. . . . The problem is not only that intangible factors such as morale, daring or luck can be more determining than the balance of forces, but that the balance as it appears in peacetime may be nothing like the balance when the first shots are fired."
2. Stephen E. Pelz, Race to Pearl Harbor: The Failure of the Second London Naval Conference and the Onset of World War II, Cambridge: Harvard University Press, 1974, pp. 221-24, and Roberta Wohlstetter, Pearl Harbor: Warning and Decision, Stanford: Stanford University Press, 1962, pp. 348, 350-52, cited by Betts, Surprise Attack, p. 135.
3. Betts, Surprise Attack p. 135. Betts notes that Wohlstetter found Japanese estimates made in 1941 of U.S. aircraft production for 1941-43 were more accurate than U.S. estimates.
4. Ibid., pp. 132-33.
5. Harriet Fast Scott and William F. Scott, The Soviet Control Structure: Capabilities for Wartime Survival, New York: Crane Russak, 1983, p. 121.
6. Ibid., pp. 127-28.
7. Ibid. The Scotts suggest that "present inefficiencies of Soviet production might actually assist in restoring some industries in rural areas after a nuclear strike. Even at

present, spare parts for Soviet equipment and machinery from automobiles to tractors are often unobtainable. Kolkhozes maintain their own blacksmith shops where spare parts for farm equipment are made. Ancient cars are often kept running by handmade parts. Factories that do produce basic items generally are less complex than those in the United States and probably would be easier to get back in operation." p. 124. The Scotts also note that rural life in the Soviet Union is on a much more basic level than in the United States and that people are used to "doing without" and enduring hardships. "They can and often do build their own homes and grow their own food." p. 125. The railroads--the only east-west link--are semi-militarized in peacetime and would be put under martial law immediately in wartime without disruption, as was done during World War II. To cope with the problem of restoring electricity for electric trains and obtaining fuel for diesel engines, the Soviets have stored hundreds of coal-burning locomotives. pp. 125-126. The Soviets also have huge stacks of assembled railway tracks for laying new lines in wartime. In addition, all trucks are publicly owned and would be available for use in wartime and would have advantages in off-road driving and in repairs over U.S. trucking. Aeroflot, the Soviet airline, has many simple aircraft for landing off runways. pp. 126-27. The Scotts also note that although the political control system is highly-centralized, it is nevertheless duplicated in many respects at the union republic and lower levels of government. Thus, if the top leadership were destroyed, they argue, these lower levels of organizations would continue to function. p. 129.

8. See Betts, Surprise Attack, chapters 7 and 8 for suggested measures to blunt the impact of surprise attack and therefore to deny its usefulness to the attacker.

9. Xing Shugang, Li Yunhua, and Liu Yingna, "Soviet-U.S. Balance of Power and Its Impact on the World Situation in the 1980s," Guoji Wenti Yanjiu, no. 1, January 1983. Foreign Broadcast Information Service (FBIS), China, 21 April 1983.

10. "Great Victory for Chairman Mao's Guideline on War," Renmin Ribao, 6 August 1977, Peking Review, no. 34, 19 August 1977.

11. See the Washington Post and the New York Times, 11 March 1982. The publication was noted in Krasnaya Zvezda, 26 February 1982, FBIS, Soviet Union, 5 March 1982. The statement cited from Ogarkov's book was a verbatim quote from an important article by Ogarkov in Kommunist, July 1981, cited by Tass, 16 July 1981. FBIS, Soviet Union, 17 July 1981.

12. Richard Soll, "The Soviet Union and Protracted Nuclear War," Strategic Review, Fall 1980, quoting from V.D. Sokolovskiy, Soviet Military Strategy, Moscow: Voenizdat, 3rd ed., 1968, edited and translated by Harriet Fast Scott, New York: Crane, Russak and Company, 1975, p. 247. A similar statement was made V. Ye. Savkin: "The initial phase of war may not be decisive," he wrote. Because of this possibility, "it is necessary to be ready for a protracted war as well, and to prepare human and materiel resources for this eventuality." The Basic Principles of Operational Art and Tactics, Moscow: 1972, p. 92. Translated by the U.S. Air Force, Washington, DC, Government Printing Office, 1974.
13. Savkin, The Basic Principles of Operational Art and Tactics, pp. 86-87.
14. V.D. Sokolovskiy, Soviet Military Strategy, p. 323.
15. See for example, Ibid., p. 315, cited by Harriett Fast Scott and William F. Scott, The Soviet Control Structure: Capabilities for Wartime Survival, Crane Russak, New York, 1983, pp. 10-11.
16. A.A. Grechko, Na Strazhe Mira i Stroitel'stva Kommunizma [On Guard Over the Peace and the Building of Communism], Moscow: Voenizdat, 1971, p. 38. Cited by Harriet Fast Scott and William F. Scott, The Soviet Control Structure, p. 112.
17. Col. S. Bartenev, "The Economy and Military Might," Soviet Military Review, no. 7, July 1981. Joint Publications Research Service (JPRS), USSR Military Affairs, 79727, 23 December 1981.
18. Ibid.
19. Li Yanning, "A Summary of News: International Situation in Retrospect and Prospect," Beijing Domestic Television Service, 3 January 1983, FBIS, China, 14 January 1983.
20. Zong He, "Changes and Developing Trends in the International Situation," Beijing Review, no. 32, 6 August 1983.
21. Su Yu, "Great Victory for Chairman Mao's Guideline on War."
22. In an interview in 1980, Deng Xiaoping reportedly said that a Soviet surgical strike against China is unlikely because under such circumstances Moscow would recognize that China would receive military aid from the United States and would mount a long-term war against the Soviet Union. See Robert L. Pfaltzgraff, Jr., "China, Soviet Strategy and American Policy," International Security, Fall 1980. vol. 5, no. 2, p. 35.

23. Xing Shugang, et. al., "Soviet-U.S. Balance of Power and its Impact on the World Situation in the 1980s."

24. V. Izmaylov, "The Character and Features of Modern War," Kommunist Vooruzhennykh Sil [Communist of the Armed Forces], p. 2, 6 March 1975, unpublished trans. Harriet Fast Scott, 18 May 1975. Cited by Joseph D. Douglass Jr., The Soviet Theater Nuclear Offensive, Studies in Communist Affairs, vol. 1. Prepared for the Office of Director of Defense Research and Engineering and the Defense Nuclear Agency. Published under the auspices of the United States Air Force. Washington, DC, Government Printing Office. See also Col. V. Molchanov, "Just and Unjust Wars," Soviet Military Review, no. 8, August 1982. JPRS, USSR Military Affairs, 81854, 27 September 1982.

25. M.V. Zakharov., ed. 50 Years of the Armed Forces of the USSR, Moscow, 1968, p. 522. Cited by Harriet Fast Scott and William F. Scott. The Armed Forces of the USSR, Westview Press: Boulder, CO, 1979, p. 51. Zakharov was Marshal of the Soviet Union and Chief of the General Staff at time of publication.

26. Col. S. Bartenev, "The Economy and Military Might," Soviet Military Review, no. 7, July 1981. JPRS, USSR Military Affairs, 79727, 23 December 1981.

27. N.A. Lomov, ed., Scientific-Technical Progress and the Revolution in Military Affairs, Moscow, 1973. Translated by the United States Air Force, Washington, DC, Government Printing Office, 1974, p. 140.

28. Scotts, The Soviet Control Structure, p. 97.

29. In an interview in mid-1981, for example, then Vice Premier Li Xiannian reportedly stated that even though it lacks advanced weaponry, China is "confident of winning" any military confrontation. The interview was conducted by Julie Moon, founder of the U.S. Asian News Service and was reported by Kyodo, 4 July 1981, FBIS: China, 6 July 1981. In his study of Chinese perceptions of the U.S.-Soviet military balance, Michael Pillsbury argues that Chinese deterrence strategy is based in large part on manipulating the emotions of the enemy. "In the Chinese view," Pillsbury writes, "it is the emotional feelings that the aggressor has about the potential victim that either invites aggression or deters it. Thus, a wide range of actions not limited to quantitative or qualitative improvement of military strength can deter aggression." See Pillsbury's Chinese Perceptions of the Soviet-American Military Balance, Systems Planning Corporation, SPC-534, March 1980, prepared for OSD/Net Assessment, Department of Defense, p. 26.

30. The Five-Year Training Program, adopted at the end of 1957, insisted on the need to for "the armed forces to maintain a high degree of alertness" in order to cope with "sudden emergencies"--a possible surprise nuclear attack--"so that the nation may not be caught unaware to any contingency. . ." See "New Training Program Promulgated by General Department of Supervision of Training," Jiefangjun Bao [Liberation Army Daily], 16 January 1958, Survey of China Mainland Press, 6 June 1958, p. 8. For an example of Chinese training in anti-chemical and anti-nuclear warfare see two brief articles in Beijing Ribao on 27 March 1980. One article describes cadres from "various wards and counties" undergoing training at the Beijing Garrison Command Headquarters in "how to use protection equipment and chemical and radiation detection equipment." The other article outlines various protective measures to be taken before, during and after a nuclear attack. JPRS, China: Political, Sociological and Military Affairs, 75672.

31. Liu Yungo, Yuanzi Wuqi Fanghu Zhishi, Beijing: Yuanzineng Chubanshe, October 1979. JPRS, China: Political, Sociological and Military Affairs, 75630, 5 May 1980.

32. Major General S.K. Il'in Morale Factors in Modern Wars, Moscow: Military Publishing House of the USSR Ministry of Defense, 1979, excerpted in Strategic Review, Summer, 1980.

33. Ibid. Emphasis in original.

34. Ibid.

35. M.V. Frunze, Selected Works, Moscow, 1951, p. 413. Cited by A.A. Sidorenko, The Offensive, Moscow, 1972, trans. by the U.S. Air Force, Washington, DC, GPO, 1974, pp. 42-43.

36. Major General S.K. Il'in Morale Factors in Modern Wars, excerpted in Strategic Review, Summer, 1980.

37. For a description and analysis of Soviet efforts to prepare for war and their implications for wartime survival see Harriet Fast Scott and William F. Scott, The Soviet Control Structure.

38. Major General S.K. Il'in Morale Factors in Modern Wars, excerpted in Strategic Review, Summer, 1980.

39. See for example Yu Petrov, "Maoist China--Accomplice of Imperialism and Source of Military Danger," Kommunist Vooruzhennykh Sil, no. 7, April 1980. JPRS, USSR Military Affairs, 76226, 14 August 1980.

40. Yu Petrov, "Maoist China--Accomplice of Imperialism and Source of Military Danger."
41. Savkin, The Basic Principles of Operational Art and Tactics, p. 90.
42. Lomov, ed., Scientific-Technical Progress and the Revolution in Military Affairs, p. 152.
43. Cited by Joseph D. Douglass, Jr., The Soviet Theater Nuclear Offensive, p. 26.
44. Sokolovskiy, Soviet Military Strategy, p. 308.
45. Ibid, p. 245.
46. Scotts, Armed Forces of the USSR, pp. 307, 324-25.
47. A.A. Grechko, On Guard for Peace and the Building of Communism, Moscow, 1971. JPRS, USSR Military Affairs, 54602, p. 60.
48. For an example of Soviet writings on training in a nuclear environment, see Lt. Col. V. Panov, "Command Training of Sergeants and Petty Officers: Boldness and Precise Calculation," Znamenosts, no. 4, April 1982, in JPRS, USSR Military Affairs, 81166, 29 June 1982.
49. Lt. General D. Volkogonov, "Beijing-NATO: Partnership of Militarists," Zarubezhnoye Voyennoye Obozreniye, no. 4, April 1982, JPRS, USSR Military Affairs, 82409, 7 December 1982.
50. "On Protracted War," May 1938 in Selected Military Writings of Mao Tse-tung, Foreign Languages Press, Peking, 1966, p. 206.
51. Mao Zedong, "Problems of Strategy in China's Revolutionary War," December 1936, in Selected Military Writings of Mao Tse-tung, Foreign Languages Press, Peking, 1966, pp. 209-210.
52. Mao Zedong, "Problems of Strategy in China's Revolutionary War," p. 215.
53. Su Yu, "Great Victory for Chairman Mao's Guideline on War."
54. Mao Zedong, "Problems of Strategy in China's Revolutionary War," p. 216.
55. Ibid., p. 216.

56. Ibid., p. 215.

57. Xu Xiangqian, "Heighten Our Vigilance and Get Prepared to Fight a War," written on the 51st anniversary of the founding of the Chinese People's Liberation Army (PLA), Hongqi, no. 8, 1978. Excerpted in Peking Review, no. 32, 11 August 1978.

58. "The Militia and People's War," Minbing Zhengzhi Keben [Political Textbook for the Militia], no. 1, 1981, JPRS, China: Political, Sociological and Military Affairs, 80020, 3 February 1982.

59. Wu Xiuquan, president of the Beijing Institute of International Strategic Studies and former Deputy Chief of Staff of the PLA, Xinhua, 19 August 1983, FBIS, China, 22 August 1983.

60. Commentator, "Attach Importance to Modern Guerrilla Warfare Training," Dazhong Ribao, 21 January 1981, JPRS, China: Political, Sociological and Military Affairs, 77703, 30 March 1981.

61. "The Militia and People's War."

62. Fu Zhong, "Mao Zedong Military Science is Forever the Chinese People's Treasure--In Celebration of the 60th Founding Anniversary of the CCP and the 54th Founding Anniversary of the PLA," Hongqi, no. 15, 1 August 1981. JPRS, Red Flag, 79063, 25 September 1981.

63. Zhang Lianzhang, "Surprise Attack--One of the Tactics of Guerrilla Warfare," Dazhong Ribao, 17 August 1981. JPRS, China: Political, Sociological and Military Affairs, 79320, 28 October 1981.

64. Commentator, "Attach Importance to Modern Guerrilla Warfare Training."

65. In 1978, Defense Minister Xu Xiangqian, pointing to Mao Zedong's call for preparation against surprise attacks, asserted that "we must, therefore, base ourselves on the assumption that the enemy will launch a war earlier than anticipated and make preparations against his launching a war at an early date, against his launching a big war, a nuclear war and a surprise attack on us." Xu Xiangqian, "Heighten Our Vigilance and Get Prepared to Fight a War."

66. "The Militia and People's War."

67. Jiefangjun Bao, 16 September 1979, JPRS, China: Political,

Sociological and Military Affairs, 75825, 6 April 1980.

68. Ningxia Ribao, 29 June 1982. FBIS, China, 3 August 1982.

69. Xinhua, 15 January 1983, FBIS, China, 17 January 1983.

70. Yang Yusheng, "After a Surprise Attack on the 'Enemy,'" Jiefang Huabao, no. 9, 1982, JPRS, China: Political, Sociological and Military Affairs, 82347, 30 November 1982.

71. Xinhua, 1 August 1983, FBIS, China, 2 August 1983.

72. Soviet officials directly approached U.S. officials in August 1969 to inquire what the United States reaction would be to a Soviet attack on Chinese nuclear facilities, according to Henry Kissinger. White House Years, Boston: Little Brown, 1979, p. 183. U.S. negotiators at the SALT talks were similarly approached in 1970. See John Newhouse, Cold Dawn: the Story of SALT, New York: Holt, Rinehart & Winston, 1973, pp. 188-89. Moscow also circulated among Eastern European governments and among foreign communist parties a letter raising the possibility of a preemptive nuclear strike against China. New York Times, 18 September 1969; Harold C. Hinton, The Bear at the Gate: Chinese Policymaking Under Soviet Pressure, Special Analysis 21, Washington, DC, American Enterprise Institute; Stanford University, 1971, pp. 29-30. In addition, Victor Louis, whose articles in the London Evening News are widely viewed as an unofficial spokesperson for the Kremlin, wrote in mid-September 1969: "Whether or not the Soviet Union will attack Lop Nor, China's nuclear center, is a question of strategy, and so the world would only learn about it afterwards." New York Times, 18 September 1969.

DISTRIBUTION LIST

DEPARTMENT OF DEFENSE

ARMED FORCES STAFF COLLEGE
ATTN LIBRARY

COMMANDER IN CHIEF, PACIFIC
ATTN C3SRD
ATTN J 54

DEFENSE ADVANCED RSCH PROJ AGENCY
ATTN TTO

DEFENSE INTELLIGENCE AGENCY
ATTN DB
ATTN DB 1 RSCH SOV WPN DIV G FERRELL
ATTN DB 6 D SPOHN
ATTN DE ESTIMATES
ATTN DIO-GPF F SHAW
ATTN DN
ATTN DT SCI TECH INTELL
ATTN DT J VORONA
ATTN LIBRARY
ATTN RTS 2B
ATTN RTS 2C TECH SVCS & SPT
ATTN VP TPO

DEFENSE NUCLEAR AGENCY

ATTN NASF
ATTN NATF
ATTN NAWF
ATTN RAAE
ATTN RAEF
ATTN RAEV
ATTN SPSS
ATTN SPTD
ATTN STBE
ATTN STNA
ATTN STRA
ATTN STSP
4 CYS ATTN STTI CA

DEFENSE TECHNICAL INFORMATION CENTER
2 CYS ATTN DD

DEPUTY UNDER SECY OF DEF (S&TNF)
ATTN T K JONES

DEPUTY UNDER SECY OF DEF POLICY
ATTN R STIVERS

FIELD COMMAND DNA DET 2
LAWRENCE LIVERMORE NATIONAL LAB
ATTN FC-1

DNA PACOM LIAISON OFFICE
ATTN J BARTLETT

FIELD COMMAND DEFENSE NUCLEAR AGENCY
ATTN FCPR
ATTN FCTT W SUMMA
ATTN FCTXE

JOINT CHIEFS OF STAFF
ATTN J 3 STRAT OPNS DIV
ATTN J-5 NUC/CHEM PLCY BR J STECKLER
ATTN J-5 NUC DIV/STRAT DIV
ATTN J 5 STRAT DIV W MCCLAIN
ATTN JAD/SFD
ATTN JAD/SSD

JOINT DATA SYSTEM SUPPORT CTR
ATTN C-312 R MASON

JOINT STRAT TGT PLANNING STAFF
ATTN JP
ATTN JPTP

NATIONAL DEFENSE UNIVERSITY
ATTN NWCO

OFFICE OF THE SECY OF DEFENSE
ATTN DOCUMENT CONTROL

PROGRAM ANALYSIS & EVALUATION
ATTN STRAT PROGS & TNF

U S EUROPEAN COMMAND/ECJ-3
ATTN ECJ-3

U S NATIONAL MILITARY REPRESENTATIVE
U S DOC OFC FOR
ATTN INTEL
ATTN OPS NUC PLANS
ATTN POL NUC CONCEPTS

U S READINESS COMMAND
ATTN J-3

UNDER SECY OF DEFENSE FOR POLICY
ATTN DIR STRAT POL F MILLER
ATTN DUSP/P

UNDER SECY OF DEF FOR RSCH & ENGRG
ATTN K HINMAN
ATTN STRAT & ARMS CONT L MENICHIEL
ATTN STRAT & SPACE SYS (OS)

DEPARTMENT OF DEFENSE (CONTINUED)

UNITED STATES CENTRAL COMMAND
ATTN CCJ3-0X DAIGNEAULT

DEPARTMENT OF THE ARMY

ASST CH OF STAFF FOR INTELLIGENCE
ATTN DAMI-FIT

DEP CH OF STAFF FOR OPS & PLANS
5 CYS ATTN DAMO-NC NUC CHEM DIR
ATTN DAMO-NCN
ATTN DAMO-RQA FIREPOWER DIV
ATTN DAMO-RQS
ATTN DAMO SSM POL MIL DIV
ATTN TECH ADVISOR

HARRY DIAMOND LABORATORIES
ATTN SCHLD-NW-P
ATTN SLCHD-DE 30000
ATTN SLCHD-NP
ATTN SLCHD-TD 00102

U S ARMY BALLISTIC RESEARCH LAB
ATTN SLCBR SS-T TECH LIB
ATTN SLCBR VL

U S ARMY BELVOIR RD & E CTR
ATTN STRBE BT TECH LIB VAULT

U S ARMY COMB ARMS COMBAT DEV ACTY
ATTN ATZL CAP

U S ARMY COMD & GENERAL STAFF COLLEGE
3 CYS ATTN COMBINED ARMS RSCH LIBRARY
ATTN DTAC

U S ARMY ENGINEER SCHOOL
ATTN LIBRARY

U S ARMY ENGR WATERWAYS EXPER STATION
ATTN JR HOUSTON, WESCV Z

U S ARMY EUROPE AND SEVENTH ARMY
ATTN AEAGB-PD PM
ATTN AEAGC NC S
ATTN AEAGC SM-A

U S ARMY FOREIGN SCIENCE & TECH CTR
ATTN DRXST SD 1

U S ARMY INFANTRY CTR & SCH
ATTN ATSH CD-CS

U S ARMY INTEL THREAT ANALYSIS DET
ATTN AIAIT HI

U S ARMY INTELLIGENCE CENTER & SCHOOL
ATTN ATSI CD-CS

U S ARMY LOGISTICS CENTER
ATTN ATCL-00L S COCKRELL

U S ARMY MATERIAL COMMAND
ATTN AMCCN

U S ARMY NUCLEAR & CHEMICAL AGENCY
ATTN LIBRARY
ATTN MONA-NU
ATTN MONA-NU LTC SLATER

U S ARMY TRADOC SYS ANALYSIS ACTVY
ATTN ATAA-TAC

U S ARMY WAR COLLEGE
ATTN DMSPO
ATTN LIBRARY
ATTN WAR GAMING FACILITY

U S ARMY MISSILE COMMAND
ATTN DRSMI XF

USA MILITARY ACADEMY
ATTN DOC LIBRARY

V CORPS
ATTN COMMANDER
ATTN G-2
ATTN G-3

VII CORPS
ATTN COMMANDER
ATTN G 2
ATTN G 3

DEPARTMENT OF THE NAVY

DAVID TAYLOR NAVAL SHIP R & D CTR
ATTN CODE 174
ATTN CODE 1750 J SYKES
ATTN CODE 1750 W CONLEY
ATTN TECH INFO CTR CODE 522 I

MARINE CORPS
ATTN CODE OT00-31
ATTN DCS (P&O) RQMTS DIV
ATTN DCS (P&O) STRAT PLANS DIV

MARINE CORPS DEV & EDUCATION COMMAND
ATTN COMMANDER

NAVAL AIR DEVELOPMENT CENTER
ATTN CODE 702 B MCHUGH

NAVAL AIR FORCE
ATTN COMMANDER

NAVAL AIR SYSTEMS COMMAND
ATTN CODE 3500 H BENEFIEL

DEPARTMENT OF THE NAVY (CONTINUED)

NAVAL INTELLIGENCE SUPPORT CTR

ATTN NISC 30
ATTN NISC-40

NAVAL OCEAN SYSTEMS CENTER

ATTN J HOOPER

NAVAL POSTGRADUATE SCHOOL

ATTN CODE 1424 LIB
ATTN PROF P J PARKER

NAVAL RESEARCH LABORATORY

ATTN CODE 2627 TECH LIB

NAVAL SEA SYSTEMS COMMAND

ATTN PMS 423
2 CYS ATTN SEA-06G31
ATTN SEA 06H2
ATTN SEA-406
ATTN SEA-55X

NAVAL SUBMARINE SCHOOL

ATTN COMMANDING OFFICER

NAVAL SURFACE FORCE

ATTN COMMANDER

NAVAL SURFACE FORCE

ATTN COMMANDER

NAVAL SURFACE WEAPONS CENTER

ATTN CODE R14
ATTN CODE R44 H GLAZ
ATTN CODE U41

NAVAL UNDERWATER SYSTEMS CTR

ATTN NUSC NPT RI TECH LIB

NAVAL WEAPONS EVALUATION FACILITY

ATTN CLASSIFIED LIBRARY

NUCLEAR WEAPONS TNG GROUP, ATLANTIC

ATTN CODE 20

NUCLEAR WEAPONS TNG GROUP, PACIFIC

ATTN NUC WARFARE DEPT

OFF OF THE DEPUTY CHIEF OF NAVAL OPS

ATTN NOP 02
ATTN NOP 021
ATTN NOP 022
ATTN NOP 03
ATTN NOP 05
ATTN NOP 06
ATTN NOP 09
ATTN NOP 098 OFC RES-DEV-TEST & EVAL
ATTN NOP 35 SURF CBT SYS DIV
ATTN NOP 50 AVN PLNS & RQMTS DEV

ATTN NOP 654 STRAT EVAL & ANAL BR

ATTN NOP 950 FORCE LEVEL PLNS DIV

ATTN NOP 951 ASW DIV

ATTN NOP 953 TAC READINESS DIV

ATTN NOP 954 STRIKE & AMPHIB WARF DIV

ATTN NOP 955 AAW DIV

3 CYS ATTN NOP 96 N PROG OFC SYS ANAL DIV

ATTN NOP 981

ATTN NOP 987

OFFICE OF THE CHIEF OF NAVAL OPNS

ATTN CNO EXECUTIVE PANEL (OP-00K)

SIXTH FLEET

ATTN COMMANDER

SUBMARINE FORCE ATLANTIC

ATTN COMMANDER

SUBMARINE FORCE PACIFIC

ATTN COMMANDER

SURFACE WARFARE DEVELOPMENT GROUP

ATTN COMMANDER

SURFACE WARFARE OFFICERS SCHOOL CMD

ATTN COMBAT SYSTEMS DEPT

U S NAVAL FORCES, EUROPE

ATTN N54

U S NAVY SECOND FLEET

ATTN N 30

U S NAVY SEVENTH FLEET

ATTN COMMANDER

DEPARTMENT OF THE AIR FORCE

AERONAUTICAL SYSTEMS DIVISION, AFSC

ATTN ASD/YYG LTC GUNDERSON

AIR FORCE/INE

ATTN INET

AIR FORCE CTR FOR STUDIES & ANALYSIS

2 CYS ATTN AFCSA/SAMI R GRIFFIN

AIR FORCE OPERATIONAL TEST & EVAL CTR

ATTN OA

AIR FORCE WEAPONS LABORATORY, AFSC

ATTN SUL

AIR UNIVERSITY LIBRARY

ATTN AUL LSE

DEPUTY CHIEF OF STAFF/AF RDQI

ATTN AF/RDQI

DEPARTMENT OF THE AIR FORCE (CONTINUED)

DEPUTY CHIEF OF STAFF/AFRD M
4 CYS ATTN AFRD M SPEC ASST FOR MX

DEPUTY CHIEF OF STAFF/XOU
ATTN AF/XOOR OPNS OPNL SPT

DEPUTY CHIEF OF STAFF/XOX
ATTN AFXOXFM PLNS, FRC DEV MUN PLNS
ATTN DIR OF PLANS AFXOX

HQ USAFE/DOJ
ATTN USAFE/DOJ CBT OPNS

NORAD
ATTN NORAD/J5YX

PACIFIC AIR FORCES
ATTN DOXO

TACOPS/INOS
ATTN TACOPS/INO

TACTICAL AIR COMMAND TAC/DOA
ATTN TAC/DOA

TACTICAL AIR COMMAND/DR
ATTN TAC/DR

TACTICAL AIR COMMAND/SMO G
ATTN TAC/SMO G

U S AIR FORCES IN EUROPE/DOA
ATTN USAFE/DOA OPNS ANAL

U S AIR FORCES IN EUROPE/IN
ATTN USAFE/IN

DEPARTMENT OF ENERGY

UNIVERSITY OF CALIFORNIA
LAWRENCE LIVERMORE NATIONAL LAB
ATTN L 389 R ANDREWS
ATTN L 6 J HARVEY
ATTN L 83 F BARISH
ATTN L 83 M GUSTAVSON
ATTN R A CORALLO
ATTN R WERNE

LOS ALAMOS NATIONAL LABORATORY
ATTN F601 T DOWLER
ATTN R SANDOVAL
ATTN R STOLPE

SANDIA NATIONAL LABORATORIES

ATTN TECH LIB 3141
ATTN 0332 J W KEIZUR
ATTN 0333 R B STRATTON

OTHER GOVERNMENT

CENTRAL INTELLIGENCE AGENCY

ATTN NATL INTEL COUNCIL/ANAL GP H FORD
ATTN OFFICE OF EAST ASIA
ATTN OFFICE OF GLOBAL ISSUES
ATTN OFFICE OF SOVIET AFFAIRS
ATTN OSR/SE/F
ATTN OSWR/NED

FEDERAL EMERGENCY MANAGEMENT AGENCY

ATTN OFC OF RSCH/NP H TOVEY

NATIONAL SECURITY COUNCIL

ATTN D LAUX
ATTN G KEMP
ATTN G SIGER
ATTN J MATLOCK
ATTN R LINHARD
ATTN R MCFARLANE
ATTN T COBB

U S DEPARTMENT OF STATE

ATTN EAP/C
ATTN EUR/RPM
ATTN EUR/SOV/MULTI
ATTN PM/TMP

WHITE HOUSE (THE)

ATTN R RILEY SPEC ASST TO THE CH OF STAFF

DEPARTMENT OF DEFENSE CONTRACTORS

KAMAN TEMPO

ATTN DASAC

KAMAN TEMPO

ATTN DASAC

PACIFIC SIERRA RESEARCH CORP

ATTN H BRODE, CHAIRMAN SAGE

PALOMAR CORP

2 CYS ATTN B GARRETT
2 CYS ATTN B GLASER